Package ‘fastNaiveBayes’

February 23, 2020

Type Package
Title Extremely Fast Implementation of a Naive Bayes Classifier
Version 2.2.0
Author Martin Skogholt
Maintainer Martin Skogholt <m.skogholt@gmail.com>

Description This is an extremely fast implementation of a Naive Bayes classifier. This package is currently the only package that supports a Bernoulli distribution, a Multinomial distribution, and a Gaussian distribution, making it suitable for both binary features, frequency counts, and numerical features. Another feature is the support of a mix of different event models. Only numerical variables are allowed, however, categorical variables can be transformed into dummies and used with the Bernoulli distribution. The implementation is largely based on the paper “A comparison of event models for Naive Bayes anti-spam e-mail filtering” written by K.M. Schneider (2003) <doi:10.3115/1067807.1067848>. Any issues can be submitted to: <https://github.com/mskogholt/fastNaiveBayes/issues>.

Depends R (>= 3.2.0)
License GPL-3
Encoding UTF-8

URL https://github.com/mskogholt/fastNaiveBayes

BugReports https://github.com/mskogholt/fastNaiveBayes/issues

LazyData TRUE
Imports Matrix, stats
Suggests knitr, rmarkdown, testthat

RoxygenNote 6.1.1
VignetteBuilder knitr
NeedsCompilation no
Repository CRAN

Date/Publication 2020-02-23 15:10:02 UTC
R topics documented:

- fastNaiveBayes .............................................................. 2
- fnb.detect_distribution ............................................. 5
- fnb.save ................................................................. 6
- fnb.update .............................................................. 7
- predict.fnb.bernoulli ................................................. 8
- tweets ................................................................. 9
- tweetsDTM ............................................................. 10

Index 71

---

**Description**

Extremely fast implementation of a Naive Bayes Classifier.

A Naive Bayes classifier that assumes independence between the feature variables. Currently, either a Bernoulli, multinomial, or Gaussian distribution can be used. The Bernoulli distribution should be used when the features are 0 or 1 to indicate the presence or absence of the feature in each document. The multinomial distribution should be used when the features are the frequency that the feature occurs in each document. Finally, the Gaussian distribution should be used with numerical variables. The distribution parameter is used to mix different distributions for different columns in the input matrix.

Use fastNaiveBayes(...) or fnb.train(...) for a mixed event distribution model. fnb.bernoulli, fnb.multinomial, fnb.gaussian and for the specific distributions

**Usage**

fastNaiveBayes(x, y, priors = NULL, laplace = 0, sparse = FALSE, check = TRUE, distribution = fnb.detect_distribution(x))

```r
## Default S3 method:
fastNaiveBayes(x, y, priors = NULL, laplace = 0,
                   sparse = FALSE, check = TRUE,
                   distribution = fnb.detect_distribution(x))
```

fnb.bernoulli(x, y, priors = NULL, laplace = 0, sparse = FALSE, check = TRUE)

```r
## Default S3 method:
fnb.bernoulli(x, y, priors = NULL, laplace = 0,
                   sparse = FALSE, check = TRUE)
```

fnb.gaussian(x, y, priors = NULL, sparse = FALSE, check = TRUE)

```r
fnb.gaussian(x, y, priors = NULL, sparse = FALSE, check = TRUE)
```
## Default S3 method:
fnb.gaussian(x, y, priors = NULL, sparse = FALSE, check = TRUE)

fnb.multinomial(x, y, priors = NULL, laplace = 0, sparse = FALSE, check = TRUE)

## Default S3 method:
fnb.multinomial(x, y, priors = NULL, laplace = 0, sparse = FALSE, check = TRUE)

fnb.poisson(x, y, priors = NULL, sparse = FALSE, check = TRUE)

## Default S3 method:
fnb.poisson(x, y, priors = NULL, sparse = FALSE, check = TRUE)

## Default S3 method:
fnb.train(x, y, priors = NULL, laplace = 0, sparse = FALSE, check = TRUE, distribution = fnb.detect_distribution(x))

## Default S3 method:
fnb.train(x, y, priors = NULL, laplace = 0, sparse = FALSE, check = TRUE, distribution = fnb.detect_distribution(x))

### Arguments

- **x**: a numeric matrix, or a dgcMatrix. For bernoulli should only contain 0's and 1's. For multinomial should only contain integers.
- **y**: a factor of classes to classify
- **priors**: a numeric vector with the priors. If left empty the priors will be determined by the relative frequency of the classes in the data
- **laplace**: A number used for Laplace smoothing. Default is 0
- **sparse**: Use a sparse matrix? If true a sparse matrix will be constructed from x. It's possible to directly feed a sparse dgcMatrix as x, which will set this parameter to TRUE
- **check**: Whether to enable formal checks on input. Recommended to set to TRUE. Set to FALSE will make it faster, but at your own risk.
- **distribution**: A list with distribution names and column names for which to use the distribution, see examples.

### Details

fastNaiveBayes(...) will convert non numeric columns to one hot encoded features to use with the Bernoulli event model. NA's in x will be set to 0 by default and observations with NA in y will be removed.
The distribution that is used for each feature is determined by a set of rules: - if the column only contains 0’s and 1’s a Bernoulli event model will be used - if the column only contains whole numbers a Multinomial event model will be used - if none of the above a Gaussian event model will be used.

By setting sparse = TRUE the numeric matrix x will be converted to a sparse dgcMatrix. This can be considerably faster in case few observations have a value different than 0.

It's also possible to directly supply a sparse dgcMatrix, which can be a lot faster in case a fastNaiveBayes model is trained multiple times on the same matrix or a subset of this. See examples for more details. Bear in mind that converting to a sparse matrix can actually be slower depending on the data.

Value

A fitted object of class "fastNaiveBayes". It has four components:

- **model** Fitted fastNaiveBayes model
- **names** Names of features used to train this fastNaiveBayes model
- **distribution** Distribution used for each column of x
- **levels** Levels of y

See Also

- **predict.fastNaiveBayes** for the predict function for the fastNaiveBayes model.

Examples

```
rm(list = ls())
library(fastNaiveBayes)
cars <- mtcars
y <- as.factor(ifelse(cars$mpg > 25, "High", "Low"))
x <- cars[,2:ncol(cars)]

mod <- fastNaiveBayes(x, y, laplace = 1)
pred <- predict(mod, newdata = x)
mean(y!=pred)

mod <- fnb.train(x, y, laplace = 1)
pred <- predict(mod, newdata = x)
mean(y!=pred)

dist <- fnb.detect_distribution(x)
bern <- fnb.bernoulli(x[,dist$bernoulli], y, laplace = 1)
pred <- predict(bern, x[,dist$bernoulli])
mean(y!=pred)

mult <- fnb.multinomial(x[,dist$multinomial], y, laplace = 1)
pred <- predict(mult, x[,dist$multinomial])
```
\begin{verbatim}
mean(y!=pred)

gauss <- fnb.gaussian(x[,dist$gaussian], y)
pred <- predict(gauss, x[,dist$gaussian])
mean(y!=pred)
\end{verbatim}

\begin{verbatim}
Distribution Detection Function

Description
Determines which distribution to use for which columns in the matrix based on a set of rules.

Usage
fnb.detect_distribution(x, nrows = nrow(x))
## Default S3 method:
fnb.detect_distribution(x, nrows = nrow(x))

Arguments
x a numeric matrix, or a dgcMatrix
nrows number of rows to use to detect distributions

Details
A simple utility function to detect the distribution to use for each columns

Value
A list of distribution names mapped to column names

Examples
rm(list = ls())
library(fastNaiveBayes)
cars <- mtcars
y <- as.factor(ifelse(cars$mpg > 25, "High", "Low"))
x <- cars[, 2:ncol(cars)]

# Uses default of all rows to determine distributions
dist <- fnb.detect_distribution(x)
print(dist)

# Uses top 10 rows of x to determine distributions. If top 10 rows
# are representative this is can be much faster.
\end{verbatim}
dist <- fnb.detect_distribution(x, nrows = 10)
print(dist)

fnb.save

Save & Load Function for Fast Naive Bayes Models

Description

Loads and saves fitted Naive Bayes models.

Usage

fnb.save(model, filename, overwrite = FALSE)

## Default S3 method:
fnb.save(model, filename, overwrite = FALSE)

fnb.load(filename)

## Default S3 method:
fnb.load(filename)

Arguments

- model: the fitted Naive Bayes model to save.
- filename: the file name to use to save or load the model.
- overwrite: Whether to allow overwriting of previously saved models.

Value

fnb.save returns the filename that was used, and fnb.load returns the saved object.

Examples

rm(list = ls())
library(fastNaiveBayes)
cars <- mtcars
y <- as.factor(ifelse(cars$mpg > 25, "High", "Low"))
x <- cars[,2:ncol(cars)]

mod <- fastNaiveBayes(x, y, laplace = 1)
fnb.save(mod, "fastNaiveBayesModel")
mod2 <- fnb.load("fastNaiveBayesModel")
identical(mod, mod2)
file.remove("fastNaiveBayesModel")
fnb.update  Update function

Description
Update function

Usage

fnb.update(object, x, y, sparse = FALSE, check = TRUE)

## Default S3 method:
fnb.update(object, x, y, sparse = FALSE, check = TRUE)

## S3 method for class 'fnb.bernoulli'
fnb.update(object, x, y, sparse = FALSE, check = TRUE)

## S3 method for class 'fnb.multinomial'
fnb.update(object, x, y, sparse = FALSE, check = TRUE)

## S3 method for class 'fnb.gaussian'
fnb.update(object, x, y, sparse = FALSE, check = TRUE)

## S3 method for class 'fnb.poisson'
fnb.update(object, x, y, sparse = FALSE, check = TRUE)

## S3 method for class 'fastNaiveBayes'
fnb.update(object, x, y, sparse = FALSE, check = TRUE)

Arguments

object fitted model
x numeric matrix
y factor of classes
sparse boolean, set to true to use sparse matrices
check boolean, set to true to enable formal checks on input
predict.fnb.bernoulli  Predict Method for fastNaiveBayes fits

Description

Uses a fastNaiveBayes model and a new data set to create the classifications. This can either be the raw probabilities generated by the fastNaiveBayes model or the classes themselves.

Usage

## S3 method for class 'fnb.bernoulli'
predict(object, newdata, type = c("class", "raw", "rawprob"), sparse = FALSE, threshold = .Machine$double.eps, check = TRUE, ...)

## S3 method for class 'fnb.gaussian'
predict(object, newdata, type = c("class", "raw", "rawprob"), sparse = FALSE, threshold = .Machine$double.eps, check = TRUE, ...)

## S3 method for class 'fnb.multinomial'
predict(object, newdata, type = c("class", "raw", "rawprob"), sparse = FALSE, threshold = .Machine$double.eps, check = TRUE, ...)

## S3 method for class 'fnb.poisson'
predict(object, newdata, type = c("class", "raw", "rawprob"), sparse = FALSE, threshold = .Machine$double.eps, check = TRUE, ...)

## S3 method for class 'fastNaiveBayes'
predict(object, newdata, type = c("class", "raw"), sparse = FALSE, threshold = .Machine$double.eps, check = TRUE, ...)

Arguments

- **object**: A fitted object of class "fnb.bernoulli", "fnb.gaussian", "fnb.multinomial" or "fastNaiveBayes".
- **newdata**: A numeric matrix. A Sparse dgcMatrix is also accepted. Note: if fnb.naiveBayes or fnb.gaussian or fnb.train was used to create the model, then if newdata contains features that were not encountered in the training data, these are omitted from the prediction. Furthermore, newdata can contain fewer features than encountered in the training data. In this case, newdata will be padded with extra columns all filled with 0's.
- **type**: If "raw", the conditional a-posterior probabilities for each class are returned, and the class with maximal probability else.
sparse | Use a sparse matrix? If true a sparse matrix will be constructed from x. It’s possible to directly feed a sparse dgcMatrix as x, which will set this parameter to TRUE

threshold | A threshold for the minimum probability. For Bernoulli and Multinomial event models Laplace smoothing should solve this, but in the case of Gaussian event models, this ensures numerical probabilities.

check | Whether to perform formal checks on the input. Set to false, if this is not necessary and speed is of the essence

Value

If type = 'class', a factor with classified class levels. If type = 'raw', a matrix with the predicted probabilities of each class, where each column in the matrix corresponds to a class level.

See Also

fastNaiveBayes for the fastNaiveBayes model

Description

As the original source says,

Usage

tweets

Format

A data frame with 14640 rows and 2 columns

- **airline_sentiment** sentiment, as either 'negative', 'neutral', 'positive'
- **text** raw text, character

Details

"A sentiment analysis job about the problems of each major U.S. airline. Twitter data was scraped from February of 2015 and contributors were asked to first classify positive, negative, and neutral tweets, followed by categorizing negative reasons (such as "late flight" or "rude service")."

The data provided here is an altered version of the original source.

Source

https://www.figure-eight.com/data-for-everyone/
tweetsDTM

This data originally came from Crowdflower’s Data for Everyone library.

Description
As the original source says,

Usage
tweetsDTM

Format
A data frame with 14640 rows and 2186 columns

- airline_sentiment  sentiment, as either 'negative','neutral','positive'
- said  Frequency count, numeric
- virginamerica  Frequency count, numeric
- commerci  Frequency count, numeric
- experi  Frequency count, numeric
- plus  Frequency count, numeric
- anoth  Frequency count, numeric
- mean  Frequency count, numeric
- must  Frequency count, numeric
- need  Frequency count, numeric
- take  Frequency count, numeric
- today  Frequency count, numeric
- trip  Frequency count, numeric
- amp  Frequency count, numeric
- blast  Frequency count, numeric
- entertain  Frequency count, numeric
- face  Frequency count, numeric
- guest  Frequency count, numeric
- littl  Frequency count, numeric
- realli  Frequency count, numeric
- recours  Frequency count, numeric
- bad  Frequency count, numeric
- big  Frequency count, numeric
- thing  Frequency count, numeric
fli Frequency count, numeric
flight Frequency count, numeric
pay Frequency count, numeric
play Frequency count, numeric
seat Frequency count, numeric
serious Frequency count, numeric
away Frequency count, numeric
everi Frequency count, numeric
near Frequency count, numeric
time Frequency count, numeric
wonut Frequency count, numeric
yes Frequency count, numeric
hat Frequency count, numeric
miss Frequency count, numeric
opportun Frequency count, numeric
without Frequency count, numeric
now Frequency count, numeric
well Frequency count, numeric
amaz Frequency count, numeric
arriv Frequency count, numeric
earli Frequency count, numeric
good Frequency count, numeric
hour Frequency count, numeric
among Frequency count, numeric
caus Frequency count, numeric
death Frequency count, numeric
know Frequency count, numeric
lead Frequency count, numeric
second Frequency count, numeric
suicid Frequency count, numeric
teen Frequency count, numeric
better Frequency count, numeric
much Frequency count, numeric
pretti Frequency count, numeric
alreadi Frequency count, numeric
australia Frequency count, numeric
deal Frequency count, numeric
even Frequency count, numeric
gone Frequency count, numeric
great Frequency count, numeric
think Frequency count, numeric
yet Frequency count, numeric
fabul Frequency count, numeric
sky Frequency count, numeric
stress Frequency count, numeric
travel Frequency count, numeric
thank Frequency count, numeric
mia Frequency count, numeric
schedul Frequency count, numeric
still Frequency count, numeric
america Frequency count, numeric
countri Frequency count, numeric
cross Frequency count, numeric
excit Frequency count, numeric
first Frequency count, numeric
heard Frequency count, numeric
lax Frequency count, numeric
mco Frequency count, numeric
noth Frequency count, numeric
virgin Frequency count, numeric
due Frequency count, numeric
either Frequency count, numeric
flew Frequency count, numeric
fulli Frequency count, numeric
help Frequency count, numeric
larg Frequency count, numeric
last Frequency count, numeric
nyc Frequency count, numeric
sfo Frequency count, numeric
side Frequency count, numeric
sit Frequency count, numeric
two Frequency count, numeric
week Frequency count, numeric
cent Frequency count, numeric
tweetsDTM

uuo  Frequency count, numeric
awesom  Frequency count, numeric
pleas  Frequency count, numeric
want  Frequency count, numeric
avail  Frequency count, numeric
carrier  Frequency count, numeric
fare  Frequency count, numeric
may  Frequency count, numeric
select  Frequency count, numeric
three  Frequency count, numeric
love  Frequency count, numeric
brand  Frequency count, numeric
feel  Frequency count, numeric
anytim  Frequency count, numeric
make  Frequency count, numeric
non  Frequency count, numeric
soon  Frequency count, numeric
stop  Frequency count, numeric
will  Frequency count, numeric
free  Frequency count, numeric
friend  Frequency count, numeric
gave  Frequency count, numeric
guy  Frequency count, numeric
internet  Frequency count, numeric
mess  Frequency count, numeric
reserv  Frequency count, numeric
appli  Frequency count, numeric
call  Frequency count, numeric
email  Frequency count, numeric
match  Frequency count, numeric
program  Frequency count, numeric
respons  Frequency count, numeric
status  Frequency count, numeric
abl  Frequency count, numeric
anyth  Frequency count, numeric
eat  Frequency count, numeric
fail  Frequency count, numeric
food  Frequency count, numeric
happen  Frequency count, numeric
hrs  Frequency count, numeric
least  Frequency count, numeric
next  Frequency count, numeric
option  Frequency count, numeric
say  Frequency count, numeric
site  Frequency count, numeric
together  Frequency count, numeric
worried  Frequency count, numeric
air  Frequency count, numeric
cold  Frequency count, numeric
get  Frequency count, numeric
ewr  Frequency count, numeric
eye  Frequency count, numeric
middle  Frequency count, numeric
red  Frequency count, numeric
add  Frequency count, numeric
birthday  Frequency count, numeric
book  Frequency count, numeric
cool  Frequency count, numeric
elev  Frequency count, numeric
enter  Frequency count, numeric
just  Frequency count, numeric
name  Frequency count, numeric
problem  Frequency count, numeric
club  Frequency count, numeric
current  Frequency count, numeric
online  Frequency count, numeric
operate  Frequency count, numeric
post  Frequency count, numeric
answer  Frequency count, numeric
expense  Frequency count, numeric
headphone  Frequency count, numeric
iad  Frequency count, numeric
left  Frequency count, numeric
number  Frequency count, numeric
one Frequency count, numeric
await Frequency count, numeric
phone Frequency count, numeric
prefer Frequency count, numeric
return Frequency count, numeric
use Frequency count, numeric
end Frequency count, numeric
hawaii Frequency count, numeric
news Frequency count, numeric
start Frequency count, numeric
via Frequency count, numeric
year Frequency count, numeric
nice Frequency count, numeric
takeoff Frequency count, numeric
touchdown Frequency count, numeric
best Frequency count, numeric
ever Frequency count, numeric
way Frequency count, numeric
airlin Frequency count, numeric
around Frequency count, numeric
done Frequency count, numeric
hand Frequency count, numeric
can Frequency count, numeric
chat Frequency count, numeric
support Frequency count, numeric
work Frequency count, numeric
angel Frequency count, numeric
beyond Frequency count, numeric
sign Frequency count, numeric
view Frequency count, numeric
account Frequency count, numeric
flyer Frequency count, numeric
hard Frequency count, numeric
hey Frequency count, numeric
plz Frequency count, numeric
upgrad Frequency count, numeric
win Frequency count, numeric
<table>
<thead>
<tr>
<th>Word</th>
<th>Frequency count, numeric</th>
</tr>
</thead>
<tbody>
<tr>
<td>citi</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>expir</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>move</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>new</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>ticket</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>unus</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>dalla</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>feb</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>leav</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>seattl</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>reason</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>rock</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>dream</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>mind</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>wow</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>agre</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>carrieunderwood</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>ladygaga</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>night</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>oscar</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>ago</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>minut</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>show</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>suppos</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>websit</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>andrew</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>impress</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>juli</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>though</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>atlanta</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>wish</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>februari</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>load</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>never</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>page</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>sinc</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>thx</td>
<td>Frequency count, numeric</td>
</tr>
</tbody>
</table>
tweetsDTM

tri Frequency count, numeric
stat Frequency count, numeric
ladi Frequency count, numeric
carri Frequency count, numeric
let Frequency count, numeric
market Frequency count, numeric
song Frequency count, numeric
shown Frequency count, numeric
mari Frequency count, numeric
sorri Frequency count, numeric
beat Frequency count, numeric
check Frequency count, numeric
dal Frequency count, numeric
dca Frequency count, numeric
someone Frequency count, numeric
earlier Frequency count, numeric
hold Frequency count, numeric
tonight Frequency count, numeric
award Frequency count, numeric
congrat Frequency count, numeric
bag Frequency count, numeric
everyth Frequency count, numeric
fine Frequency count, numeric
lost Frequency count, numeric
card Frequency count, numeric
chang Frequency count, numeric
credit Frequency count, numeric
fee Frequency count, numeric
waiv Frequency count, numeric
custom Frequency count, numeric
servic Frequency count, numeric
team Frequency count, numeric
track Frequency count, numeric
baggag Frequency count, numeric
dirti Frequency count, numeric
floor Frequency count, numeric
game Frequency count, numeric
step Frequency count, numeric
tabl Frequency count, numeric
time Frequency count, numeric
crew Frequency count, numeric
like Frequency count, numeric
plane Frequency count, numeric
ride Frequency count, numeric
bill Frequency count, numeric
correct Frequency count, numeric
morn Frequency count, numeric
sat Frequency count, numeric
yall Frequency count, numeric
feet Frequency count, numeric
film Frequency count, numeric
student Frequency count, numeric
watch Frequency count, numeric
differ Frequency count, numeric
media Frequency count, numeric
anyway Frequency count, numeric
asap Frequency count, numeric
human Frequency count, numeric
speak Frequency count, numeric
biz Frequency count, numeric
jetblu Frequency count, numeric
southwestair Frequency count, numeric
inflight Frequency count, numeric
interest Frequency count, numeric
member Frequency count, numeric
delay Frequency count, numeric
late Frequency count, numeric
whenev Frequency count, numeric
cancel Frequency count, numeric
four Frequency count, numeric
busi Frequency count, numeric
disappoint Frequency count, numeric
meet Frequency count, numeric
share Frequency count, numeric
ium Frequency count, numeric
troubl Frequency count, numeric
wife Frequency count, numeric
bring Frequency count, numeric
code Frequency count, numeric
bet Frequency count, numeric
random Frequency count, numeric
home Frequency count, numeric
life Frequency count, numeric
back Frequency count, numeric
yeah Frequency count, numeric
point Frequency count, numeric
recent Frequency count, numeric
flightl Frequency count, numeric
jfk Frequency count, numeric
saturday Frequency count, numeric
video Frequency count, numeric
went Frequency count, numeric
land Frequency count, numeric
redirect Frequency count, numeric
btw Frequency count, numeric
user Frequency count, numeric
desktop Frequency count, numeric
mobil Frequency count, numeric
bin Frequency count, numeric
class Frequency count, numeric
passeng Frequency count, numeric
remov Frequency count, numeric
scan Frequency count, numeric
told Frequency count, numeric
uncomfort Frequency count, numeric
find Frequency count, numeric
anyon Frequency count, numeric
useless Frequency count, numeric
boy Frequency count, numeric
thursday Frequency count, numeric
appoint Frequency count, numeric
music Frequency count, numeric
bought Frequency count, numeric
direct Frequency count, numeric
fuel Frequency count, numeric
layov Frequency count, numeric
unexpect Frequency count, numeric
vega Frequency count, numeric
exp Frequency count, numeric
peopl Frequency count, numeric
customerservic Frequency count, numeric
uouo Frequency count, numeric
hung Frequency count, numeric
line Frequency count, numeric
sarcasm Frequency count, numeric
info Frequency count, numeric
plain Frequency count, numeric
text Frequency count, numeric
version Frequency count, numeric
look Frequency count, numeric
weather Frequency count, numeric
getaway Frequency count, numeric
lot Frequency count, numeric
oneway Frequency count, numeric
uiio Frequency count, numeric
come Frequency count, numeric
horribl Frequency count, numeric
phl Frequency count, numeric
concern Frequency count, numeric
tech Frequency count, numeric
comfort Frequency count, numeric
easi Frequency count, numeric
flown Frequency count, numeric
repre Frequency count, numeric
beauti Frequency count, numeric
kick Frequency count, numeric
rep Frequency count, numeric
design Frequency count, numeric
right Frequency count, numeric
tweetsDTM

secur  Frequency count, numeric
gate  Frequency count, numeric
kept  Frequency count, numeric
las  Frequency count, numeric
run  Frequency count, numeric
wait  Frequency count, numeric
browser  Frequency count, numeric
folk  Frequency count, numeric
total  Frequency count, numeric
connect  Frequency count, numeric
long  Frequency count, numeric
min  Frequency count, numeric
seem  Frequency count, numeric
francisco  Frequency count, numeric
outstand  Frequency count, numeric
san  Frequency count, numeric
absolut  Frequency count, numeric
delight  Frequency count, numeric
complimentari  Frequency count, numeric
provid  Frequency count, numeric
intern  Frequency count, numeric
that  Frequency count, numeric
complet  Frequency count, numeric
depart  Frequency count, numeric
month  Frequency count, numeric
nonstop  Frequency count, numeric
link  Frequency count, numeric
precheck  Frequency count, numeric
process  Frequency count, numeric
tsa  Frequency count, numeric
hotel  Frequency count, numeric
terribl  Frequency count, numeric
cabo  Frequency count, numeric
assist  Frequency count, numeric
give  Frequency count, numeric
shame  Frequency count, numeric
yesterday  Frequency count, numeric
advis  Frequency count, numeric

dog  Frequency count, numeric

dull  Frequency count, numeric

longer  Frequency count, numeric

pls  Frequency count, numeric

queue  Frequency count, numeric

regist  Frequency count, numeric

redcarpet  Frequency count, numeric

drop  Frequency count, numeric

alway  Frequency count, numeric

buy  Frequency count, numeric

creat  Frequency count, numeric

frustrat  Frequency count, numeric

afford  Frequency count, numeric

buck  Frequency count, numeric

extra  Frequency count, numeric

hire  Frequency count, numeric

lame  Frequency count, numeric

luggage  Frequency count, numeric

might  Frequency count, numeric

cake  Frequency count, numeric

world  Frequency count, numeric

fit  Frequency count, numeric

midnight  Frequency count, numeric

monday  Frequency count, numeric

sooner  Frequency count, numeric

cant  Frequency count, numeric

imagin  Frequency count, numeric

indic  Frequency count, numeric

web  Frequency count, numeric

ran  Frequency count, numeric

staff  Frequency count, numeric

super  Frequency count, numeric

across  Frequency count, numeric

offer  Frequency count, numeric

paid  Frequency count, numeric

premium  Frequency count, numeric
sad  Frequency count, numeric
infant Frequency count, numeric
possibl Frequency count, numeric
question Frequency count, numeric
welcom Frequency count, numeric
refresh Frequency count, numeric
damag Frequency count, numeric
polici Frequency count, numeric
understand Frequency count, numeric
destroy Frequency count, numeric
alon Frequency count, numeric
board Frequency count, numeric
kid Frequency count, numeric
prioriti Frequency count, numeric
special Frequency count, numeric
happi Frequency count, numeric
purchas Frequency count, numeric
definit Frequency count, numeric
field Frequency count, numeric
dfw Frequency count, numeric
lga Frequency count, numeric
driver Frequency count, numeric
friday Frequency count, numeric
licens Frequency count, numeric
contact Frequency count, numeric
error Frequency count, numeric
keep Frequency count, numeric
button Frequency count, numeric
reschedul Frequency count, numeric
fix Frequency count, numeric
rang Frequency count, numeric
got Frequency count, numeric
tomorrow Frequency count, numeric
unaccept Frequency count, numeric
stuck Frequency count, numeric
includ Frequency count, numeric
pair Frequency count, numeric
white Frequency count, numeric
wine Frequency count, numeric
agent Frequency count, numeric
close Frequency count, numeric
dullesairport Frequency count, numeric
silver Frequency count, numeric
austin Frequency count, numeric
plan Frequency count, numeric
rout Frequency count, numeric
central Frequency count, numeric
normal Frequency count, numeric
receiv Frequency count, numeric
repli Frequency count, numeric
smh Frequency count, numeric
airport Frequency count, numeric
checkin Frequency count, numeric
desk Frequency count, numeric
logan Frequency count, numeric
open Frequency count, numeric
jump Frequency count, numeric
daili Frequency count, numeric
luv Frequency count, numeric
april Frequency count, numeric
begin Frequency count, numeric
fuck Frequency count, numeric
unit Frequency count, numeric
follow Frequency count, numeric
apolog Frequency count, numeric
mani Frequency count, numeric
respond Frequency count, numeric
wors Frequency count, numeric
money Frequency count, numeric
reimburse Frequency count, numeric
spend Frequency count, numeric
strand Frequency count, numeric
choic Frequency count, numeric
sjc Frequency count, numeric
southwest  Frequency count, numeric
claim    Frequency count, numeric
confirm  Frequency count, numeric
day      Frequency count, numeric
inquir   Frequency count, numeric
bos      Frequency count, numeric
notif    Frequency count, numeric
rebook   Frequency count, numeric
met      Frequency count, numeric
gold     Frequency count, numeric
cmh      Frequency count, numeric
see      Frequency count, numeric
worst    Frequency count, numeric
stuff    Frequency count, numeric
wrong    Frequency count, numeric
head     Frequency count, numeric
issu     Frequency count, numeric
item     Frequency count, numeric
americanairlin  Frequency count, numeric
lose     Frequency count, numeric
suck     Frequency count, numeric
dmd      Frequency count, numeric
drive    Frequency count, numeric
flightlat Frequency count, numeric
mon      Frequency count, numeric
notic    Frequency count, numeric
boston   Frequency count, numeric
abil     Frequency count, numeric
expect   Frequency count, numeric
stink    Frequency count, numeric
danc     Frequency count, numeric
high     Frequency count, numeric
school   Frequency count, numeric
appar    Frequency count, numeric
faster   Frequency count, numeric
quick    Frequency count, numeric
nervous  Frequency count, numeric
sent Frequency count, numeric
pictur Frequency count, numeric
wing Frequency count, numeric
crisi Frequency count, numeric
pressur Frequency count, numeric
texa Frequency count, numeric
job Frequency count, numeric
pilot Frequency count, numeric
snow Frequency count, numeric
afternoon Frequency count, numeric
area Frequency count, numeric
york Frequency count, numeric
mention Frequency count, numeric
reclin Frequency count, numeric
row Frequency count, numeric
drink Frequency count, numeric
handl Frequency count, numeric
mechan Frequency count, numeric
scare Frequency count, numeric
kill Frequency count, numeric
twitter Frequency count, numeric
charg Frequency count, numeric
refund Frequency count, numeric
refus Frequency count, numeric
access Frequency count, numeric
canut Frequency count, numeric
ipad Frequency count, numeric
iphon Frequency count, numeric
passbook Frequency count, numeric
click Frequency count, numeric
broken Frequency count, numeric
forward Frequency count, numeric
sec Frequency count, numeric
cost Frequency count, numeric
ugh Frequency count, numeric
along Frequency count, numeric
pdx Frequency count, numeric
put Frequency count, numeric
gonna Frequency count, numeric
bug Frequency count, numeric
itus Frequency count, numeric
report Frequency count, numeric
bit Frequency count, numeric
center Frequency count, numeric
attend Frequency count, numeric
password Frequency count, numeric
reset Frequency count, numeric
base Frequency count, numeric
disrupt Frequency count, numeric
someth Frequency count, numeric
departur Frequency count, numeric
palm Frequency count, numeric
spring Frequency count, numeric
fun Frequency count, numeric
sound Frequency count, numeric
updat Frequency count, numeric
count Frequency count, numeric
somehow Frequency count, numeric
continu Frequency count, numeric
sort Frequency count, numeric
sweet Frequency count, numeric
coffe Frequency count, numeric
ice Frequency count, numeric
assault Frequency count, numeric
file Frequency count, numeric
trust Frequency count, numeric
destin Frequency count, numeric
sever Frequency count, numeric
wheel Frequency count, numeric
itinerari Frequency count, numeric
abq Frequency count, numeric
becom Frequency count, numeric
event Frequency count, numeric
girl Frequency count, numeric
inspir  Frequency count, numeric
march  Frequency count, numeric
entir  Frequency count, numeric
improv  Frequency count, numeric
request  Frequency count, numeric
treat  Frequency count, numeric
window  Frequency count, numeric
grand  Frequency count, numeric
exhaust  Frequency count, numeric
flier  Frequency count, numeric
frequent  Frequency count, numeric
inconveni  Frequency count, numeric
purpos  Frequency count, numeric
wtf  Frequency count, numeric
full  Frequency count, numeric
boo  Frequency count, numeric
place  Frequency count, numeric
result  Frequency count, numeric
usa  Frequency count, numeric
instead  Frequency count, numeric
pillow  Frequency count, numeric
race  Frequency count, numeric
advantag  Frequency count, numeric
fight  Frequency count, numeric
salt  Frequency count, numeric
behind  Frequency count, numeric
cabin  Frequency count, numeric
fav  Frequency count, numeric
hot  Frequency count, numeric
pari  Frequency count, numeric
ui0  Frequency count, numeric
surgeri  Frequency count, numeric
tell  Frequency count, numeric
suitcas  Frequency count, numeric
past  Frequency count, numeric
order  Frequency count, numeric
regul  Frequency count, numeric
<table>
<thead>
<tr>
<th>atlant</th>
<th>Frequency count, numeric</th>
</tr>
</thead>
<tbody>
<tr>
<td>benefit</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>virginatlant</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>came</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>husband</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>screen</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>bare</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>light</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>turbul</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>profit</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>funni</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>stori</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>forecast</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>nytim</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>applic</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>flylaxairport</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>posit</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>wonder</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>despit</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>revenu</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>competit</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>increas</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>sos</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>degre</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>wind</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>safeti</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>wanna</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>hope</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>newark</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>inappropri</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>probabl</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>save</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>standbi</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>comp</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>brought</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>readi</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>manag</td>
<td>Frequency count, numeric</td>
</tr>
</tbody>
</table>
tweetsDTM

loyal  Frequency count, numeric
solut  Frequency count, numeric
spoke  Frequency count, numeric
jacket Frequency count, numeric
convers Frequency count, numeric
method Frequency count, numeric
partner Frequency count, numeric
payment Frequency count, numeric
rate   Frequency count, numeric
visa   Frequency count, numeric
promot Frequency count, numeric
recommend Frequency count, numeric
aus    Frequency count, numeric
turn   Frequency count, numeric
cours  Frequency count, numeric
famili Frequency count, numeric
receipt Frequency count, numeric
badg  Frequency count, numeric
superior Frequency count, numeric
standard Frequency count, numeric
pick   Frequency count, numeric
tweet Frequency count, numeric
car    Frequency count, numeric
rental Frequency count, numeric
child  Frequency count, numeric
cust   Frequency count, numeric
lap    Frequency count, numeric
chanc Frequency count, numeric
gift   Frequency count, numeric
bank  Frequency count, numeric
constant Frequency count, numeric
joke  Frequency count, numeric
also  Frequency count, numeric
bday  Frequency count, numeric
eastern Frequency count, numeric
ella  Frequency count, numeric
grandma Frequency count, numeric
greet Frequency count, numeric
stewardess Frequency count, numeric
tix Frequency count, numeric
transact Frequency count, numeric
moment Frequency count, numeric
send Frequency count, numeric
havenut Frequency count, numeric
submit Frequency count, numeric
fat Frequency count, numeric
ceo Frequency count, numeric
low Frequency count, numeric
model Frequency count, numeric
brilliant Frequency count, numeric
omg Frequency count, numeric
thought Frequency count, numeric
comput Frequency count, numeric
pull Frequency count, numeric
incid Frequency count, numeric
laptop Frequency count, numeric
guess Frequency count, numeric
road Frequency count, numeric
announce Frequency count, numeric
dollar Frequency count, numeric
deserv Frequency count, numeric
address Frequency count, numeric
bounc Frequency count, numeric
exist Frequency count, numeric
fyi Frequency count, numeric
recurr Frequency count, numeric
svc Frequency count, numeric
toward Frequency count, numeric
app Frequency count, numeric
develop Frequency count, numeric
favorit Frequency count, numeric
channel Frequency count, numeric
crap Frequency count, numeric
set Frequency count, numeric
integ
mexico
paper
wast
accept
system
black
tea
spread
learn
experienc
incred
philadelphia
houston
final
avgeek
forget
futur
jack
kinda
diego
malfunct
poor
thankyou
jose
compet
excel
portland
addit
thur
uau
carryon
lock
group
room
nightmar
classi
<table>
<thead>
<tr>
<th>Word</th>
<th>Frequency count, numeric</th>
</tr>
</thead>
<tbody>
<tr>
<td>strong</td>
<td></td>
</tr>
<tr>
<td>sure</td>
<td></td>
</tr>
<tr>
<td>shit</td>
<td></td>
</tr>
<tr>
<td>bump</td>
<td></td>
</tr>
<tr>
<td>luckili</td>
<td></td>
</tr>
<tr>
<td>rough</td>
<td></td>
</tr>
<tr>
<td>perfect</td>
<td></td>
</tr>
<tr>
<td>rais</td>
<td></td>
</tr>
<tr>
<td>stay</td>
<td></td>
</tr>
<tr>
<td>sun</td>
<td></td>
</tr>
<tr>
<td>man</td>
<td></td>
</tr>
<tr>
<td>wifi</td>
<td></td>
</tr>
<tr>
<td>donut</td>
<td></td>
</tr>
<tr>
<td>iull</td>
<td></td>
</tr>
<tr>
<td>saw</td>
<td></td>
</tr>
<tr>
<td>dad</td>
<td></td>
</tr>
<tr>
<td>part</td>
<td></td>
</tr>
<tr>
<td>whole</td>
<td></td>
</tr>
<tr>
<td>europ</td>
<td></td>
</tr>
<tr>
<td>short</td>
<td></td>
</tr>
<tr>
<td>abc</td>
<td></td>
</tr>
<tr>
<td>overhead</td>
<td></td>
</tr>
<tr>
<td>person</td>
<td></td>
</tr>
<tr>
<td>ask</td>
<td></td>
</tr>
<tr>
<td>luck</td>
<td></td>
</tr>
<tr>
<td>accommod</td>
<td></td>
</tr>
<tr>
<td>dear</td>
<td></td>
</tr>
<tr>
<td>lol</td>
<td></td>
</tr>
<tr>
<td>actual</td>
<td></td>
</tr>
<tr>
<td>other</td>
<td></td>
</tr>
<tr>
<td>serv</td>
<td></td>
</tr>
<tr>
<td>affect</td>
<td></td>
</tr>
<tr>
<td>shock</td>
<td></td>
</tr>
<tr>
<td>storm</td>
<td></td>
</tr>
<tr>
<td>umm</td>
<td></td>
</tr>
<tr>
<td>advanc</td>
<td></td>
</tr>
<tr>
<td>cut</td>
<td></td>
</tr>
<tr>
<td>Term</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>--------------</td>
<td>--------------------------</td>
</tr>
<tr>
<td>execut</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>manner</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>mayb</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>chase</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>pass</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>son</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>weak</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>didnt</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>given</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>jan</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>miami</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>septemb</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>explain</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>talk</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>almost</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>daughter</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>ppl</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>flightr</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>repeat</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>anymor</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>platinum</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>termin</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>badcustomerservic</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>instruct</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>rude</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>overnight</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>client</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>iah</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>taken</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>accord</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>illeg</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>detail</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>dmed</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>charlott</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>ignor</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>touch</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>form</td>
<td>Frequency count, numeric</td>
</tr>
</tbody>
</table>
anywher  Frequency count, numeric
upon  Frequency count, numeric
ground  Frequency count, numeric
cessna  Frequency count, numeric
els  Frequency count, numeric
appreci  Frequency count, numeric
tarmac  Frequency count, numeric
outsid  Frequency count, numeric
break  Frequency count, numeric
guitar  Frequency count, numeric
truli  Frequency count, numeric
besid  Frequency count, numeric
third  Frequency count, numeric
disabl  Frequency count, numeric
search  Frequency count, numeric
enough  Frequency count, numeric
rule  Frequency count, numeric
denver  Frequency count, numeric
mistak  Frequency count, numeric
train  Frequency count, numeric
ord  Frequency count, numeric
avoid  Frequency count, numeric
found  Frequency count, numeric
supervisor  Frequency count, numeric
pre  Frequency count, numeric
preboard  Frequency count, numeric
dept  Frequency count, numeric
okc  Frequency count, numeric
thru  Frequency count, numeric
employe  Frequency count, numeric
equip  Frequency count, numeric
medic  Frequency count, numeric
upset  Frequency count, numeric
consider  Frequency count, numeric
intl  Frequency count, numeric
thnx  Frequency count, numeric
activ  Frequency count, numeric
emerg Frequency count, numeric
militari Frequency count, numeric
mom Frequency count, numeric
wont Frequency count, numeric
mile Frequency count, numeric
mileageplus Frequency count, numeric
complain Frequency count, numeric
throw Frequency count, numeric
unfortun Frequency count, numeric
american Frequency count, numeric
ahead Frequency count, numeric
bird Frequency count, numeric
coach Frequency count, numeric
control Frequency count, numeric
rather Frequency count, numeric
sincer Frequency count, numeric
bother Frequency count, numeric
delta Frequency count, numeric
unhelp Frequency count, numeric
attempt Frequency count, numeric
buddi Frequency count, numeric
neglig Frequency count, numeric
believ Frequency count, numeric
fll Frequency count, numeric
disappear Frequency count, numeric
stand Frequency count, numeric
record Frequency count, numeric
nut Frequency count, numeric
guid Frequency count, numeric
read Frequency count, numeric
bogota Frequency count, numeric
everyon Frequency count, numeric
inform Frequency count, numeric
outbound Frequency count, numeric
aircraft Frequency count, numeric
switch Frequency count, numeric
crash Frequency count, numeric
<table>
<thead>
<tr>
<th>Term</th>
<th>Frequency count, numeric</th>
</tr>
</thead>
<tbody>
<tr>
<td>knew</td>
<td></td>
</tr>
<tr>
<td>negoti</td>
<td></td>
</tr>
<tr>
<td>winter</td>
<td></td>
</tr>
<tr>
<td>coat</td>
<td></td>
</tr>
<tr>
<td>scam</td>
<td></td>
</tr>
<tr>
<td>reach</td>
<td></td>
</tr>
<tr>
<td>nowhere</td>
<td></td>
</tr>
<tr>
<td>honor</td>
<td></td>
</tr>
<tr>
<td>hear</td>
<td></td>
</tr>
<tr>
<td>quit</td>
<td></td>
</tr>
<tr>
<td>pathet</td>
<td></td>
</tr>
<tr>
<td>boot</td>
<td></td>
</tr>
<tr>
<td>avail</td>
<td></td>
</tr>
<tr>
<td>minor</td>
<td></td>
</tr>
<tr>
<td>babi</td>
<td></td>
</tr>
<tr>
<td>mine</td>
<td></td>
</tr>
<tr>
<td>huh</td>
<td></td>
</tr>
<tr>
<td>goe</td>
<td></td>
</tr>
<tr>
<td>obvious</td>
<td></td>
</tr>
<tr>
<td>simpl</td>
<td></td>
</tr>
<tr>
<td>disrespect</td>
<td></td>
</tr>
<tr>
<td>neglect</td>
<td></td>
</tr>
<tr>
<td>enjoy</td>
<td></td>
</tr>
<tr>
<td>finger</td>
<td></td>
</tr>
<tr>
<td>zone</td>
<td></td>
</tr>
<tr>
<td>date</td>
<td></td>
</tr>
<tr>
<td>excus</td>
<td></td>
</tr>
<tr>
<td>zero</td>
<td></td>
</tr>
<tr>
<td>decemb</td>
<td></td>
</tr>
<tr>
<td>octob</td>
<td></td>
</tr>
<tr>
<td>sna</td>
<td></td>
</tr>
<tr>
<td>weekend</td>
<td></td>
</tr>
<tr>
<td>flightd</td>
<td></td>
</tr>
<tr>
<td>local</td>
<td></td>
</tr>
<tr>
<td>faith</td>
<td></td>
</tr>
<tr>
<td>ski</td>
<td></td>
</tr>
<tr>
<td>held</td>
<td></td>
</tr>
<tr>
<td>Word</td>
<td>Frequency count, numeric</td>
</tr>
<tr>
<td>--------</td>
<td>--------------------------</td>
</tr>
<tr>
<td>coast</td>
<td></td>
</tr>
<tr>
<td>tourist</td>
<td></td>
</tr>
<tr>
<td>listen</td>
<td></td>
</tr>
<tr>
<td>whoever</td>
<td></td>
</tr>
<tr>
<td>charact</td>
<td></td>
</tr>
<tr>
<td>limit</td>
<td></td>
</tr>
<tr>
<td>appear</td>
<td></td>
</tr>
<tr>
<td>doesnt</td>
<td></td>
</tr>
<tr>
<td>pop</td>
<td></td>
</tr>
<tr>
<td>coupon</td>
<td></td>
</tr>
<tr>
<td>ridicul</td>
<td></td>
</tr>
<tr>
<td>airfar</td>
<td></td>
</tr>
<tr>
<td>cheaper</td>
<td></td>
</tr>
<tr>
<td>heathrow</td>
<td></td>
</tr>
<tr>
<td>propri</td>
<td></td>
</tr>
<tr>
<td>complaint</td>
<td></td>
</tr>
<tr>
<td>ref</td>
<td></td>
</tr>
<tr>
<td>unhappi</td>
<td></td>
</tr>
<tr>
<td>jet</td>
<td></td>
</tr>
<tr>
<td>privat</td>
<td></td>
</tr>
<tr>
<td>fund</td>
<td></td>
</tr>
<tr>
<td>atl</td>
<td></td>
</tr>
<tr>
<td>matter</td>
<td></td>
</tr>
<tr>
<td>yep</td>
<td></td>
</tr>
<tr>
<td>loui</td>
<td></td>
</tr>
<tr>
<td>difficult</td>
<td></td>
</tr>
<tr>
<td>prepar</td>
<td></td>
</tr>
<tr>
<td>confid</td>
<td></td>
</tr>
<tr>
<td>seek</td>
<td></td>
</tr>
<tr>
<td>bot</td>
<td></td>
</tr>
<tr>
<td>worth</td>
<td></td>
</tr>
<tr>
<td>california</td>
<td></td>
</tr>
<tr>
<td>conf</td>
<td></td>
</tr>
<tr>
<td>communic</td>
<td></td>
</tr>
<tr>
<td>far</td>
<td></td>
</tr>
<tr>
<td>horrid</td>
<td></td>
</tr>
<tr>
<td>note</td>
<td></td>
</tr>
</tbody>
</table>
tweetsDTM

- top Frequency count, numeric
- unitedairlin Frequency count, numeric
- kudo Frequency count, numeric
- usual Frequency count, numeric
- advisori Frequency count, numeric
- quot Frequency count, numeric
- heat Frequency count, numeric
- rememb Frequency count, numeric
- captain Frequency count, numeric
- extrem Frequency count, numeric
- effici Frequency count, numeric
- real Frequency count, numeric
- henc Frequency count, numeric
- cloth Frequency count, numeric
- curious Frequency count, numeric
- conveni Frequency count, numeric
- washington Frequency count, numeric
- chicago Frequency count, numeric
- china Frequency count, numeric
- leg Frequency count, numeric
- loung Frequency count, numeric
- dms Frequency count, numeric
- owe Frequency count, numeric
- okay Frequency count, numeric
- dead Frequency count, numeric
- proper Frequency count, numeric
- forgot Frequency count, numeric
- onto Frequency count, numeric
- atroci Frequency count, numeric
- impass Frequency count, numeric
- esp Frequency count, numeric
- lhr Frequency count, numeric
- doubt Frequency count, numeric
- vacat Frequency count, numeric
- compliment Frequency count, numeric
- assur Frequency count, numeric
- nope Frequency count, numeric
sleep Frequency count, numeric
compens Frequency count, numeric
origin Frequency count, numeric
ruin Frequency count, numeric
defin Frequency count, numeric
inbound Frequency count, numeric
valid Frequency count, numeric
deliv Frequency count, numeric
deliveri Frequency count, numeric
hostag Frequency count, numeric
lbs Frequency count, numeric
machin Frequency count, numeric
write Frequency count, numeric
blame Frequency count, numeric
previous Frequency count, numeric
tel Frequency count, numeric
aviv Frequency count, numeric
uiunit Frequency count, numeric
feedback Frequency count, numeric
taxi Frequency count, numeric
action Frequency count, numeric
solv Frequency count, numeric
tire Frequency count, numeric
comment Frequency count, numeric
clt Frequency count, numeric
idea Frequency count, numeric
neveragain Frequency count, numeric
within Frequency count, numeric
cancun Frequency count, numeric
continent Frequency count, numeric
equal Frequency count, numeric
deep Frequency count, numeric
figur Frequency count, numeric
fran Frequency count, numeric
pack Frequency count, numeric
pax Frequency count, numeric
screw Frequency count, numeric
hou  Frequency count, numeric
pos  Frequency count, numeric
wake  Frequency count, numeric
counter  Frequency count, numeric
nobodi  Frequency count, numeric
flyohar  Frequency count, numeric
regret  Frequency count, numeric
annoy  Frequency count, numeric
door  Frequency count, numeric
premier  Frequency count, numeric
bullshit  Frequency count, numeric
phoenix  Frequency count, numeric
yea  Frequency count, numeric
encount  Frequency count, numeric
stellar  Frequency count, numeric
front  Frequency count, numeric
pocket  Frequency count, numeric
rip  Frequency count, numeric
absurd  Frequency count, numeric
fact  Frequency count, numeric
walk  Frequency count, numeric
happili  Frequency count, numeric
public  Frequency count, numeric
stranger  Frequency count, numeric
nah  Frequency count, numeric
split  Frequency count, numeric
wks  Frequency count, numeric
bwi  Frequency count, numeric
appropri  Frequency count, numeric
review  Frequency count, numeric
overbook  Frequency count, numeric
unprofession  Frequency count, numeric
consid  Frequency count, numeric
corp  Frequency count, numeric
unabl  Frequency count, numeric
flightat  Frequency count, numeric
courtesi  Frequency count, numeric
diff  Frequency count, numeric
tag  Frequency count, numeric
certif  Frequency count, numeric
bar  Frequency count, numeric
appl  Frequency count, numeric
bunch  Frequency count, numeric
adopt  Frequency count, numeric
outlet  Frequency count, numeric
incompet  Frequency count, numeric
finish  Frequency count, numeric
exact  Frequency count, numeric
carousel  Frequency count, numeric
easier  Frequency count, numeric
monitor  Frequency count, numeric
friendlyski  Frequency count, numeric
spare  Frequency count, numeric
unless  Frequency count, numeric
disast  Frequency count, numeric
period  Frequency count, numeric
apart  Frequency count, numeric
fall  Frequency count, numeric
fleet  Frequency count, numeric
notcool  Frequency count, numeric
balanc  Frequency count, numeric
impact  Frequency count, numeric
major  Frequency count, numeric
refuel  Frequency count, numeric
hundr  Frequency count, numeric
quiet  Frequency count, numeric
rectifi  Frequency count, numeric
situat  Frequency count, numeric
spent  Frequency count, numeric
clue  Frequency count, numeric
liter  Frequency count, numeric
list  Frequency count, numeric
dia  Frequency count, numeric
remind  Frequency count, numeric
devic Frequency count, numeric
insid Frequency count, numeric
failur Frequency count, numeric
assum Frequency count, numeric
effort Frequency count, numeric
finest Frequency count, numeric
confus Frequency count, numeric
airplan Frequency count, numeric
project Frequency count, numeric
softwar Frequency count, numeric
ogg Frequency count, numeric
display Frequency count, numeric
howev Frequency count, numeric
closest Frequency count, numeric
clear Frequency count, numeric
refer Frequency count, numeric
discuss Frequency count, numeric
shot Frequency count, numeric
pacif Frequency count, numeric
spot Frequency count, numeric
generic Frequency count, numeric
unnecessari Frequency count, numeric
carseat Frequency count, numeric
decis Frequency count, numeric
kpu Frequency count, numeric
kit Frequency count, numeric
pjs Frequency count, numeric
ensur Frequency count, numeric
flat Frequency count, numeric
lie Frequency count, numeric
stl Frequency count, numeric
membership Frequency count, numeric
catch Frequency count, numeric
karen Frequency count, numeric
chicken Frequency count, numeric
fair Frequency count, numeric
den Frequency count, numeric
**tweetsDTM**

<table>
<thead>
<tr>
<th>Term</th>
<th>Frequency count, numeric</th>
</tr>
</thead>
<tbody>
<tr>
<td>ohar</td>
<td></td>
</tr>
<tr>
<td>reinstat</td>
<td></td>
</tr>
<tr>
<td>offic</td>
<td></td>
</tr>
<tr>
<td>attach</td>
<td></td>
</tr>
<tr>
<td>photo</td>
<td></td>
</tr>
<tr>
<td>damn</td>
<td></td>
</tr>
<tr>
<td>canada</td>
<td></td>
</tr>
<tr>
<td>yvr</td>
<td></td>
</tr>
<tr>
<td>divert</td>
<td></td>
</tr>
<tr>
<td>msi</td>
<td></td>
</tr>
<tr>
<td>canadian</td>
<td></td>
</tr>
<tr>
<td>male</td>
<td></td>
</tr>
<tr>
<td>pic</td>
<td></td>
</tr>
<tr>
<td>threaten</td>
<td></td>
</tr>
<tr>
<td>yell</td>
<td></td>
</tr>
<tr>
<td>tho</td>
<td></td>
</tr>
<tr>
<td>frm</td>
<td></td>
</tr>
<tr>
<td>reflight</td>
<td></td>
</tr>
<tr>
<td>sea</td>
<td></td>
</tr>
<tr>
<td>connector</td>
<td></td>
</tr>
<tr>
<td>gross</td>
<td></td>
</tr>
<tr>
<td>exampl</td>
<td></td>
</tr>
<tr>
<td>statement</td>
<td></td>
</tr>
<tr>
<td>otherwise</td>
<td></td>
</tr>
<tr>
<td>stood</td>
<td></td>
</tr>
<tr>
<td>inadequ</td>
<td></td>
</tr>
<tr>
<td>unfriendlysky</td>
<td></td>
</tr>
<tr>
<td>seen</td>
<td></td>
</tr>
<tr>
<td>singl</td>
<td></td>
</tr>
<tr>
<td>locat</td>
<td></td>
</tr>
<tr>
<td>boyfriend</td>
<td></td>
</tr>
<tr>
<td>gotta</td>
<td></td>
</tr>
<tr>
<td>stolen</td>
<td></td>
</tr>
<tr>
<td>wallet</td>
<td></td>
</tr>
<tr>
<td>til</td>
<td></td>
</tr>
<tr>
<td>repair</td>
<td></td>
</tr>
<tr>
<td>tuesday</td>
<td></td>
</tr>
</tbody>
</table>
fit Frequency count, numeric
nonsens Frequency count, numeric
incur Frequency count, numeric
abt Frequency count, numeric
deni Frequency count, numeric
prove Frequency count, numeric
yrs Frequency count, numeric
etc Frequency count, numeric
investig Frequency count, numeric
sell Frequency count, numeric
cuz Frequency count, numeric
hubbi Frequency count, numeric
power Frequency count, numeric
rare Frequency count, numeric
poorcustomerservic Frequency count, numeric
forth Frequency count, numeric
multipl Frequency count, numeric
angri Frequency count, numeric
lake Frequency count, numeric
consist Frequency count, numeric
commit Frequency count, numeric
merger Frequency count, numeric
glitch Frequency count, numeric
mainten Frequency count, numeric
state Frequency count, numeric
truth Frequency count, numeric
unfriend Frequency count, numeric
ill Frequency count, numeric
level Frequency count, numeric
lufthansa Frequency count, numeric
replac Frequency count, numeric
sick Frequency count, numeric
typic Frequency count, numeric
prompt Frequency count, numeric
simpli Frequency count, numeric
twice Frequency count, numeric
hate Frequency count, numeric
orf Frequency count, numeric
driven Frequency count, numeric
uauau Frequency count, numeric
age Frequency count, numeric
choos Frequency count, numeric
poorservic Frequency count, numeric
general Frequency count, numeric
attent Frequency count, numeric
lit Frequency count, numeric
aspen Frequency count, numeric
certain Frequency count, numeric
florida Frequency count, numeric
reco Frequency count, numeric
allow Frequency count, numeric
overweight Frequency count, numeric
measur Frequency count, numeric
woman Frequency count, numeric
miser Frequency count, numeric
block Frequency count, numeric
dming Frequency count, numeric
artcl Frequency count, numeric
redeem Frequency count, numeric
ton Frequency count, numeric
what Frequency count, numeric
gain Frequency count, numeric
musician Frequency count, numeric
holder Frequency count, numeric
whose Frequency count, numeric
blog Frequency count, numeric
cleveland Frequency count, numeric
sunday Frequency count, numeric
basic Frequency count, numeric
assign Frequency count, numeric
sens Frequency count, numeric
doesnut Frequency count, numeric
english Frequency count, numeric
hassl Frequency count, numeric
tweetsDTM

- `badservic` Frequency count, numeric
- `whatev` Frequency count, numeric
- `london` Frequency count, numeric
- `cute` Frequency count, numeric
- `kind` Frequency count, numeric
- `speed` Frequency count, numeric
- `cowork` Frequency count, numeric
- `hell` Frequency count, numeric
- `flightst` Frequency count, numeric
- `settl` Frequency count, numeric
- `rdu` Frequency count, numeric
- `shop` Frequency count, numeric
- `onboard` Frequency count, numeric
- `pts` Frequency count, numeric
- `compar` Frequency count, numeric
- `mex` Frequency count, numeric
- `ten` Frequency count, numeric
- `usairway` Frequency count, numeric
- `usairwaysfail` Frequency count, numeric
- `practic` Frequency count, numeric
- `occur` Frequency count, numeric
- `outsourc` Frequency count, numeric
- `collect` Frequency count, numeric
- `suggest` Frequency count, numeric
- `formal` Frequency count, numeric
- `handler` Frequency count, numeric
- `bridg` Frequency count, numeric
- `freez` Frequency count, numeric
- `temp` Frequency count, numeric
- `foot` Frequency count, numeric
- `broke` Frequency count, numeric
- `global` Frequency count, numeric
- `yyz` Frequency count, numeric
- `piss` Frequency count, numeric
- `engin` Frequency count, numeric
- `deplan` Frequency count, numeric
- `releas` Frequency count, numeric
advertis Frequency count, numeric
extend Frequency count, numeric
aircanada Frequency count, numeric
lesson Frequency count, numeric
written Frequency count, numeric
pray Frequency count, numeric
chair Frequency count, numeric
meal Frequency count, numeric
unreal Frequency count, numeric
costum Frequency count, numeric
understaf Frequency count, numeric
beer Frequency count, numeric
understood Frequency count, numeric
oop Frequency count, numeric
crazi Frequency count, numeric
rob Frequency count, numeric
shut Frequency count, numeric
worthless Frequency count, numeric
polic Frequency count, numeric
clean Frequency count, numeric
dri Frequency count, numeric
msg Frequency count, numeric
wet Frequency count, numeric
piec Frequency count, numeric
print Frequency count, numeric
airway Frequency count, numeric
mci Frequency count, numeric
segment Frequency count, numeric
slight Frequency count, numeric
acct Frequency count, numeric
eta Frequency count, numeric
bty Frequency count, numeric
cun Frequency count, numeric
nite Frequency count, numeric
worstcustomerservic Frequency count, numeric
rerout Frequency count, numeric
cri Frequency count, numeric
garbage Frequency count, numeric
epic Frequency count, numeric
jetway Frequency count, numeric
reagan Frequency count, numeric
ber Frequency count, numeric
till Frequency count, numeric
frankfurt Frequency count, numeric
fan Frequency count, numeric
double Frequency count, numeric
lisa Frequency count, numeric
breakfast Frequency count, numeric
irrit Frequency count, numeric
humor Frequency count, numeric
copi Frequency count, numeric
ual Frequency count, numeric
tampa Frequency count, numeric
robot Frequency count, numeric
visit Frequency count, numeric
wear Frequency count, numeric
grr Frequency count, numeric
raleigh Frequency count, numeric
terri Frequency count, numeric
freq Frequency count, numeric
rsw Frequency count, numeric
lousi Frequency count, numeric
fault Frequency count, numeric
honeymoon Frequency count, numeric
gotten Frequency count, numeric
epicfail Frequency count, numeric
awar Frequency count, numeric
hilar Frequency count, numeric
ktm Frequency count, numeric
wreck Frequency count, numeric
offi Frequency count, numeric
pleasant Frequency count, numeric
acknowledg Frequency count, numeric
dot Frequency count, numeric
<table>
<thead>
<tr>
<th>Term</th>
<th>Frequency count, numeric</th>
</tr>
</thead>
<tbody>
<tr>
<td>brother</td>
<td></td>
</tr>
<tr>
<td>hous</td>
<td></td>
</tr>
<tr>
<td>pleasur</td>
<td></td>
</tr>
<tr>
<td>bdl</td>
<td></td>
</tr>
<tr>
<td>explor</td>
<td></td>
</tr>
<tr>
<td>facebook</td>
<td></td>
</tr>
<tr>
<td>tue</td>
<td></td>
</tr>
<tr>
<td>buf</td>
<td></td>
</tr>
<tr>
<td>downgrad</td>
<td></td>
</tr>
<tr>
<td>nashvill</td>
<td></td>
</tr>
<tr>
<td>surpris</td>
<td></td>
</tr>
<tr>
<td>freak</td>
<td></td>
</tr>
<tr>
<td>snowi</td>
<td></td>
</tr>
<tr>
<td>ineffici</td>
<td></td>
</tr>
<tr>
<td>tini</td>
<td></td>
</tr>
<tr>
<td>csr</td>
<td></td>
</tr>
<tr>
<td>dozen</td>
<td></td>
</tr>
<tr>
<td>kiosk</td>
<td></td>
</tr>
<tr>
<td>patienc</td>
<td></td>
</tr>
<tr>
<td>bus</td>
<td></td>
</tr>
<tr>
<td>prob</td>
<td></td>
</tr>
<tr>
<td>disgrac</td>
<td></td>
</tr>
<tr>
<td>hit</td>
<td></td>
</tr>
<tr>
<td>forev</td>
<td></td>
</tr>
<tr>
<td>tone</td>
<td></td>
</tr>
<tr>
<td>worker</td>
<td></td>
</tr>
<tr>
<td>lazi</td>
<td></td>
</tr>
<tr>
<td>frozen</td>
<td></td>
</tr>
<tr>
<td>metal</td>
<td></td>
</tr>
<tr>
<td>truck</td>
<td></td>
</tr>
<tr>
<td>valu</td>
<td></td>
</tr>
<tr>
<td>fast</td>
<td></td>
</tr>
<tr>
<td>reconsid</td>
<td></td>
</tr>
<tr>
<td>attitud</td>
<td></td>
</tr>
<tr>
<td>respect</td>
<td></td>
</tr>
<tr>
<td>pat</td>
<td></td>
</tr>
<tr>
<td>disgust</td>
<td></td>
</tr>
</tbody>
</table>
restor  Frequency count, numeric
worstairlineev  Frequency count, numeric
valuabl  Frequency count, numeric
park  Frequency count, numeric
desper  Frequency count, numeric
girlfriend  Frequency count, numeric
fraud  Frequency count, numeric
pretzel  Frequency count, numeric
lower  Frequency count, numeric
crappi  Frequency count, numeric
legal  Frequency count, numeric
hang  Frequency count, numeric
intent  Frequency count, numeric
felt  Frequency count, numeric
higher  Frequency count, numeric
qualiti  Frequency count, numeric
spanish  Frequency count, numeric
mech  Frequency count, numeric
retriev  Frequency count, numeric
except  Frequency count, numeric
contract  Frequency count, numeric
pvd  Frequency count, numeric
upcom  Frequency count, numeric
cover  Frequency count, numeric
dumb  Frequency count, numeric
hurt  Frequency count, numeric
won  Frequency count, numeric
memori  Frequency count, numeric
circumst  Frequency count, numeric
disconnect  Frequency count, numeric
reliabl  Frequency count, numeric
none  Frequency count, numeric
relat  Frequency count, numeric
act  Frequency count, numeric
organ  Frequency count, numeric
bay  Frequency count, numeric
import  Frequency count, numeric
describ  Frequency count, numeric
flightawar  Frequency count, numeric
per  Frequency count, numeric
tail  Frequency count, numeric
dinner  Frequency count, numeric
honest  Frequency count, numeric
capt  Frequency count, numeric
explan  Frequency count, numeric
cab  Frequency count, numeric
pit  Frequency count, numeric
dont  Frequency count, numeric
cheap  Frequency count, numeric
worstairlin  Frequency count, numeric
bummer  Frequency count, numeric
content  Frequency count, numeric
realiz  Frequency count, numeric
discov  Frequency count, numeric
ive  Frequency count, numeric
bhm  Frequency count, numeric
god  Frequency count, numeric
educ  Frequency count, numeric
volunt  Frequency count, numeric
philippin  Frequency count, numeric
aisl  Frequency count, numeric
drunk  Frequency count, numeric
log  Frequency count, numeric
strike  Frequency count, numeric
social  Frequency count, numeric
planet  Frequency count, numeric
hdn  Frequency count, numeric
concours  Frequency count, numeric
shuttl  Frequency count, numeric
known  Frequency count, numeric
sight  Frequency count, numeric
trap  Frequency count, numeric
numer  Frequency count, numeric
slept  Frequency count, numeric
prior Frequency count, numeric
runway Frequency count, numeric
fals Frequency count, numeric
idiot Frequency count, numeric
relationship Frequency count, numeric
everytim Frequency count, numeric
green Frequency count, numeric
present Frequency count, numeric
faa Frequency count, numeric
suit Frequency count, numeric
elit Frequency count, numeric
staralli Frequency count, numeric
sister Frequency count, numeric
true Frequency count, numeric
live Frequency count, numeric
five Frequency count, numeric
push Frequency count, numeric
ass Frequency count, numeric
sometim Frequency count, numeric
stt Frequency count, numeric
separ Frequency count, numeric
often Frequency count, numeric
bathroom Frequency count, numeric
unitedsuck Frequency count, numeric
toddler Frequency count, numeric
competitor Frequency count, numeric
pend Frequency count, numeric
toilet Frequency count, numeric
outrag Frequency count, numeric
chi Frequency count, numeric
safe Frequency count, numeric
proof Frequency count, numeric
automat Frequency count, numeric
cater Frequency count, numeric
tvs Frequency count, numeric
overs Frequency count, numeric
rent Frequency count, numeric
<table>
<thead>
<tr>
<th>Word</th>
<th>Frequency count, numeric</th>
</tr>
</thead>
<tbody>
<tr>
<td>cluster</td>
<td></td>
</tr>
<tr>
<td>confer</td>
<td></td>
</tr>
<tr>
<td>memphi</td>
<td></td>
</tr>
<tr>
<td>notifi</td>
<td></td>
</tr>
<tr>
<td>bereav</td>
<td></td>
</tr>
<tr>
<td>discount</td>
<td></td>
</tr>
<tr>
<td>funer</td>
<td></td>
</tr>
<tr>
<td>meant</td>
<td></td>
</tr>
<tr>
<td>passport</td>
<td></td>
</tr>
<tr>
<td>approach</td>
<td></td>
</tr>
<tr>
<td>rapid</td>
<td></td>
</tr>
<tr>
<td>tick</td>
<td></td>
</tr>
<tr>
<td>appel</td>
<td></td>
</tr>
<tr>
<td>journey</td>
<td></td>
</tr>
<tr>
<td>spell</td>
<td></td>
</tr>
<tr>
<td>perhaps</td>
<td></td>
</tr>
<tr>
<td>ahold</td>
<td></td>
</tr>
<tr>
<td>delet</td>
<td></td>
</tr>
<tr>
<td>notch</td>
<td></td>
</tr>
<tr>
<td>cvg</td>
<td></td>
</tr>
<tr>
<td>shoulder</td>
<td></td>
</tr>
<tr>
<td>skill</td>
<td></td>
</tr>
<tr>
<td>allianc</td>
<td></td>
</tr>
<tr>
<td>belong</td>
<td></td>
</tr>
<tr>
<td>depend</td>
<td></td>
</tr>
<tr>
<td>star</td>
<td></td>
</tr>
<tr>
<td>staf</td>
<td></td>
</tr>
<tr>
<td>hospit</td>
<td></td>
</tr>
<tr>
<td>juan</td>
<td></td>
</tr>
<tr>
<td>personnel</td>
<td></td>
</tr>
<tr>
<td>particular</td>
<td></td>
</tr>
<tr>
<td>fam</td>
<td></td>
</tr>
<tr>
<td>pricey</td>
<td></td>
</tr>
<tr>
<td>unitedfail</td>
<td></td>
</tr>
<tr>
<td>inexcus</td>
<td></td>
</tr>
<tr>
<td>million</td>
<td></td>
</tr>
<tr>
<td>immedi</td>
<td></td>
</tr>
</tbody>
</table>
weight  Frequency count, numeric
arrang  Frequency count, numeric
condit  Frequency count, numeric
guarante  Frequency count, numeric
albani  Frequency count, numeric
peanut  Frequency count, numeric
clarifi  Frequency count, numeric
unknown  Frequency count, numeric
wed  Frequency count, numeric
ramp  Frequency count, numeric
cranki  Frequency count, numeric
hello  Frequency count, numeric
detroit  Frequency count, numeric
bush  Frequency count, numeric
cle  Frequency count, numeric
alright  Frequency count, numeric
especi  Frequency count, numeric
shitti  Frequency count, numeric
amount  Frequency count, numeric
tremend  Frequency count, numeric
averag  Frequency count, numeric
abysm  Frequency count, numeric
unbeliev  Frequency count, numeric
decid  Frequency count, numeric
mark  Frequency count, numeric
children  Frequency count, numeric
draw  Frequency count, numeric
roundtrip  Frequency count, numeric
loyalti  Frequency count, numeric
perk  Frequency count, numeric
download  Frequency count, numeric
hnl  Frequency count, numeric
cxl  Frequency count, numeric
progress  Frequency count, numeric
fiasco  Frequency count, numeric
callback  Frequency count, numeric
corpor  Frequency count, numeric
relax  Frequency count, numeric
mother  Frequency count, numeric
natur  Frequency count, numeric
wasnt  Frequency count, numeric
proud  Frequency count, numeric
water  Frequency count, numeric
legroom  Frequency count, numeric
rest  Frequency count, numeric
cooki  Frequency count, numeric
chose  Frequency count, numeric
young  Frequency count, numeric
tmrw  Frequency count, numeric
weird  Frequency count, numeric
stream  Frequency count, numeric
decent  Frequency count, numeric
merg  Frequency count, numeric
pound  Frequency count, numeric
fire  Frequency count, numeric
blow  Frequency count, numeric
eventu  Frequency count, numeric
pain  Frequency count, numeric
cnn  Frequency count, numeric
approv  Frequency count, numeric
flts  Frequency count, numeric
ship  Frequency count, numeric
similar  Frequency count, numeric
inch  Frequency count, numeric
couldnt  Frequency count, numeric
south  Frequency count, numeric
six  Frequency count, numeric
directtv  Frequency count, numeric
advic  Frequency count, numeric
closer  Frequency count, numeric
traffic  Frequency count, numeric
beliz  Frequency count, numeric
unlik  Frequency count, numeric
congratul  Frequency count, numeric
airbus  Frequency count, numeric
wall  Frequency count, numeric
shout  Frequency count, numeric
disregard  Frequency count, numeric
dragon  Frequency count, numeric
pen  Frequency count, numeric
backup  Frequency count, numeric
remain  Frequency count, numeric
bna  Frequency count, numeric
jax  Frequency count, numeric
exit  Frequency count, numeric
wheelchair  Frequency count, numeric
plenti  Frequency count, numeric
yay  Frequency count, numeric
fra  Frequency count, numeric
die  Frequency count, numeric
plastic  Frequency count, numeric
stock  Frequency count, numeric
roc  Frequency count, numeric
orlean  Frequency count, numeric
map  Frequency count, numeric
insult  Frequency count, numeric
north  Frequency count, numeric
sale  Frequency count, numeric	
tkt  Frequency count, numeric
smile  Frequency count, numeric
ind  Frequency count, numeric
interview  Frequency count, numeric
biggest  Frequency count, numeric
ripoff  Frequency count, numeric
although  Frequency count, numeric
difficulti  Frequency count, numeric
nothappi  Frequency count, numeric
celebr  Frequency count, numeric
sle  Frequency count, numeric
argu  Frequency count, numeric
histori  Frequency count, numeric
<table>
<thead>
<tr>
<th>Term</th>
<th>Frequency count, numeric</th>
</tr>
</thead>
<tbody>
<tr>
<td>overall</td>
<td></td>
</tr>
<tr>
<td>expedia</td>
<td></td>
</tr>
<tr>
<td>document</td>
<td></td>
</tr>
<tr>
<td>technic</td>
<td></td>
</tr>
<tr>
<td>login</td>
<td></td>
</tr>
<tr>
<td>incent</td>
<td></td>
</tr>
<tr>
<td>bahama</td>
<td></td>
</tr>
<tr>
<td>horrend</td>
<td></td>
</tr>
<tr>
<td>procedur</td>
<td></td>
</tr>
<tr>
<td>parti</td>
<td></td>
</tr>
<tr>
<td>cell</td>
<td></td>
</tr>
<tr>
<td>teach</td>
<td></td>
</tr>
<tr>
<td>isnt</td>
<td></td>
</tr>
<tr>
<td>tpa</td>
<td></td>
</tr>
<tr>
<td>msp</td>
<td></td>
</tr>
<tr>
<td>chariti</td>
<td></td>
</tr>
<tr>
<td>aviat</td>
<td></td>
</tr>
<tr>
<td>cup</td>
<td></td>
</tr>
<tr>
<td>extens</td>
<td></td>
</tr>
<tr>
<td>somebodi</td>
<td></td>
</tr>
<tr>
<td>john</td>
<td></td>
</tr>
<tr>
<td>verifi</td>
<td></td>
</tr>
<tr>
<td>furious</td>
<td></td>
</tr>
<tr>
<td>bankrupt</td>
<td></td>
</tr>
<tr>
<td>iuv</td>
<td></td>
</tr>
<tr>
<td>type</td>
<td></td>
</tr>
<tr>
<td>googl</td>
<td></td>
</tr>
<tr>
<td>cart</td>
<td></td>
</tr>
<tr>
<td>golf</td>
<td></td>
</tr>
<tr>
<td>signific</td>
<td></td>
</tr>
<tr>
<td>insan</td>
<td></td>
</tr>
<tr>
<td>remot</td>
<td></td>
</tr>
<tr>
<td>volum</td>
<td></td>
</tr>
<tr>
<td>patient</td>
<td></td>
</tr>
<tr>
<td>folder</td>
<td></td>
</tr>
<tr>
<td>darn</td>
<td></td>
</tr>
<tr>
<td>tight</td>
<td></td>
</tr>
</tbody>
</table>
clarif Frequency count, numeric
east Frequency count, numeric
embarrass Frequency count, numeric
warn Frequency count, numeric
wednesday Frequency count, numeric
combin Frequency count, numeric
res Frequency count, numeric
snack Frequency count, numeric
belt Frequency count, numeric
autom Frequency count, numeric
transport Frequency count, numeric
mad Frequency count, numeric
june Frequency count, numeric
specif Frequency count, numeric
function Frequency count, numeric
lavatori Frequency count, numeric
winner Frequency count, numeric
roll Frequency count, numeric
accur Frequency count, numeric
companion Frequency count, numeric
necessari Frequency count, numeric
thousand Frequency count, numeric
pbi Frequency count, numeric
father Frequency count, numeric
lifetim Frequency count, numeric
burn Frequency count, numeric
misplac Frequency count, numeric
laguardia Frequency count, numeric
size Frequency count, numeric
box Frequency count, numeric
haha Frequency count, numeric
donat Frequency count, numeric
wth Frequency count, numeric
hungri Frequency count, numeric
maint Frequency count, numeric
firstclass Frequency count, numeric
massiv Frequency count, numeric
women Frequency count, numeric
waiver Frequency count, numeric
incorrect Frequency count, numeric
dobett Frequency count, numeric
weigh Frequency count, numeric
whether Frequency count, numeric
wrote Frequency count, numeric
custserv Frequency count, numeric
parent Frequency count, numeric
term Frequency count, numeric
camera Frequency count, numeric
didnut Frequency count, numeric
pittsburgh Frequency count, numeric
tab Frequency count, numeric
harder Frequency count, numeric
van Frequency count, numeric
somewher Frequency count, numeric
rush Frequency count, numeric
letter Frequency count, numeric
fresh Frequency count, numeric
mission Frequency count, numeric
subpar Frequency count, numeric
ric Frequency count, numeric
your Frequency count, numeric
august Frequency count, numeric
reward Frequency count, numeric
headach Frequency count, numeric
conflic Frequency count, numeric
pref Frequency count, numeric
fort Frequency count, numeric
invit Frequency count, numeric
flytpa Frequency count, numeric
protect Frequency count, numeric
neither Frequency count, numeric
laugh Frequency count, numeric
scale Frequency count, numeric
nonexist Frequency count, numeric
blah  Frequency count, numeric  
tear  Frequency count, numeric  
hartford  Frequency count, numeric  
mke  Frequency count, numeric  
warm  Frequency count, numeric  
odd  Frequency count, numeric  
packag  Frequency count, numeric  
omaha  Frequency count, numeric  
initi  Frequency count, numeric  
lauderdal  Frequency count, numeric  
lmao  Frequency count, numeric  
feed  Frequency count, numeric  
earth  Frequency count, numeric  
fortun  Frequency count, numeric  
heart  Frequency count, numeric  
dang  Frequency count, numeric  
ici  Frequency count, numeric  
magazin  Frequency count, numeric  
weur  Frequency count, numeric  
greatservic  Frequency count, numeric  
rno  Frequency count, numeric  
street  Frequency count, numeric  
nexus  Frequency count, numeric  
cheat  Frequency count, numeric  
inde  Frequency count, numeric  
there  Frequency count, numeric  
qualifi  Frequency count, numeric  
asham  Frequency count, numeric  
speedi  Frequency count, numeric  
success  Frequency count, numeric  
gogo  Frequency count, numeric  
hub  Frequency count, numeric  
dime  Frequency count, numeric  
disorgan  Frequency count, numeric  
sigh  Frequency count, numeric  
proactiv  Frequency count, numeric  
phx  Frequency count, numeric
reflect  Frequency count, numeric
station  Frequency count, numeric
antonio  Frequency count, numeric
noon    Frequency count, numeric
ohio    Frequency count, numeric
aug     Frequency count, numeric
columbus Frequency count, numeric
oakland Frequency count, numeric
bostonlogan Frequency count, numeric
heavili Frequency count, numeric
enrout  Frequency count, numeric
soak    Frequency count, numeric
rethink Frequency count, numeric
stroller Frequency count, numeric
athlet  Frequency count, numeric
aka     Frequency count, numeric
telephon Frequency count, numeric
band    Frequency count, numeric
ring    Frequency count, numeric
color   Frequency count, numeric
compass Frequency count, numeric
lucki   Frequency count, numeric
jamaica Frequency count, numeric
loss    Frequency count, numeric
cali    Frequency count, numeric
sunni   Frequency count, numeric
harbor  Frequency count, numeric
batteri Frequency count, numeric
baltimor Frequency count, numeric
greenvill Frequency count, numeric
usair   Frequency count, numeric
indi    Frequency count, numeric
northeast Frequency count, numeric
cmon    Frequency count, numeric
loos    Frequency count, numeric
spoken  Frequency count, numeric
heck    Frequency count, numeric
colleagu Frequency count, numeric
resch Frequency count, numeric
louisvill Frequency count, numeric
blue Frequency count, numeric
fortunemagazin Frequency count, numeric
lunch Frequency count, numeric
anxious Frequency count, numeric
inclement Frequency count, numeric
gari Frequency count, numeric
kelli Frequency count, numeric
stupid Frequency count, numeric
summer Frequency count, numeric
cash Frequency count, numeric
crowd Frequency count, numeric
utah Frequency count, numeric
velourl Frequency count, numeric
triflight Frequency count, numeric
steal Frequency count, numeric
selfi Frequency count, numeric
paypal Frequency count, numeric
nearbi Frequency count, numeric
pwm Frequency count, numeric
aww Frequency count, numeric
colleg Frequency count, numeric
physic Frequency count, numeric
savannah Frequency count, numeric
anticp Frequency count, numeric
uuuu Frequency count, numeric
lauren Frequency count, numeric
lovedragonss Frequency count, numeric
costa Frequency count, numeric
rica Frequency count, numeric
chao Frequency count, numeric
unload Frequency count, numeric
pump Frequency count, numeric
evalu Frequency count, numeric
predict Frequency count, numeric
<table>
<thead>
<tr>
<th>Word</th>
<th>Frequency count, numeric</th>
</tr>
</thead>
<tbody>
<tr>
<td>disney</td>
<td></td>
</tr>
<tr>
<td>dealt</td>
<td></td>
</tr>
<tr>
<td>fastest</td>
<td></td>
</tr>
<tr>
<td>involv</td>
<td></td>
</tr>
<tr>
<td>regular</td>
<td></td>
</tr>
<tr>
<td>lodg</td>
<td></td>
</tr>
<tr>
<td>caller</td>
<td></td>
</tr>
<tr>
<td>nation</td>
<td></td>
</tr>
<tr>
<td>sju</td>
<td></td>
</tr>
<tr>
<td>fleek</td>
<td></td>
</tr>
<tr>
<td>trueblu</td>
<td></td>
</tr>
<tr>
<td>uijetblu</td>
<td></td>
</tr>
<tr>
<td>plat</td>
<td></td>
</tr>
<tr>
<td>beach</td>
<td></td>
</tr>
<tr>
<td>flyfi</td>
<td></td>
</tr>
<tr>
<td>viequ</td>
<td></td>
</tr>
<tr>
<td>njb</td>
<td></td>
</tr>
<tr>
<td>jblu</td>
<td></td>
</tr>
<tr>
<td>stole</td>
<td></td>
</tr>
<tr>
<td>wsj</td>
<td></td>
</tr>
<tr>
<td>barbado</td>
<td></td>
</tr>
<tr>
<td>cuba</td>
<td></td>
</tr>
<tr>
<td>reli</td>
<td></td>
</tr>
<tr>
<td>agenc</td>
<td></td>
</tr>
<tr>
<td>mem</td>
<td></td>
</tr>
<tr>
<td>appeas</td>
<td></td>
</tr>
<tr>
<td>republican</td>
<td></td>
</tr>
<tr>
<td>waterburi</td>
<td></td>
</tr>
<tr>
<td>flyingitforward</td>
<td></td>
</tr>
<tr>
<td>mint</td>
<td></td>
</tr>
<tr>
<td>nantucket</td>
<td></td>
</tr>
<tr>
<td>glass</td>
<td></td>
</tr>
<tr>
<td>mosaic</td>
<td></td>
</tr>
<tr>
<td>goodwill</td>
<td></td>
</tr>
<tr>
<td>getittogeth</td>
<td></td>
</tr>
<tr>
<td>endless</td>
<td></td>
</tr>
<tr>
<td>brandmane</td>
<td></td>
</tr>
</tbody>
</table>
hpn Frequency count, numeric
prais Frequency count, numeric
circl Frequency count, numeric
journal Frequency count, numeric
sxm Frequency count, numeric
asleep Frequency count, numeric
blueman Frequency count, numeric
digit Frequency count, numeric
flyitforward Frequency count, numeric
crewmemb Frequency count, numeric
liveri Frequency count, numeric
bottl Frequency count, numeric
divers Frequency count, numeric
dissatisfi Frequency count, numeric
comm Frequency count, numeric
dump Frequency count, numeric
paint Frequency count, numeric
shoutout Frequency count, numeric
alaska Frequency count, numeric
weull Frequency count, numeric
jvmchat Frequency count, numeric
sympathi Frequency count, numeric
dividend Frequency count, numeric
chairman Frequency count, numeric
uiusairway Frequency count, numeric
exec Frequency count, numeric
ttl Frequency count, numeric
flydelta Frequency count, numeric
logist Frequency count, numeric
sexual Frequency count, numeric
fear Frequency count, numeric
aadvantag Frequency count, numeric
cot Frequency count, numeric
key Frequency count, numeric
usairwayssuck Frequency count, numeric
med Frequency count, numeric
vile Frequency count, numeric
uii  Frequency count, numeric  
uiamericanair  Frequency count, numeric  
assult  Frequency count, numeric  
dfwairport  Frequency count, numeric  
filmcrew  Frequency count, numeric  
cowboycerron  Frequency count, numeric  
americanview  Frequency count, numeric  

Details

"A sentiment analysis job about the problems of each major U.S. airline. Twitter data was scraped from February of 2015 and contributors were asked to first classify positive, negative, and neutral tweets, followed by categorizing negative reasons (such as "late flight" or "rude service")."

The data provided here is an altered and cleaned version version of the original source.

Source

https://www.figure-eight.com/data-for-everyone/
Index

*Topic datasets
tweets, 9
tweetsDTM, 10

fastNaiveBayes, 2, 9
fnb.bernoulli (fastNaiveBayes), 2
fnb.detect_distribution, 5
fnb.gaussian (fastNaiveBayes), 2
fnb.load (fnb.save), 6
fnb.multinomial (fastNaiveBayes), 2
fnb.poisson (fastNaiveBayes), 2
fnb.save, 6
fnb.train (fastNaiveBayes), 2
fnb.update, 7

predict.fastNaiveBayes, 4
predict.fastNaiveBayes
  (predict.fnb.bernoulli), 8
predict.fnb.bernoulli, 8
predict.fnb.gaussian
  (predict.fnb.bernoulli), 8
predict.fnb.multinomial
  (predict.fnb.bernoulli), 8
predict.fnb.poisson
  (predict.fnb.bernoulli), 8

tweets, 9
tweetsDTM, 10