Package ‘moonBook’

January 5, 2022

Title Functions and Datasets for the Book by Keon-Woong Moon
Version 0.3.1
URL https://github.com/cardiomoon/moonBook
BugReports https://github.com/cardiomoon/moonBook/issues
Description Several analysis-related functions for the book entitled "R statistics and graph for medical articles" (written in Korean), version 1, by Keon-Woong Moon with Korean demographic data with several plot functions.
Depends R (>= 3.1.2)
License GPL-2
LazyData true
Encoding UTF-8
Imports nortest, survival, sjmisc, stringr, magrittr, crayon
Suggests testthat, knitr, ggplot2, sjlabelled, ztable, rmarkdown
VignetteBuilder knitr
RoxygenNote 7.1.2
NeedsCompilation no
Author Keon-Woong Moon [aut, cre]
Maintainer Keon-Woong Moon <cardiomoon@gmail.com>
Repository CRAN
Date/Publication 2022-01-05 07:40:02 UTC

R topics documented:
acs ................................................................. 3
addComma ...................................................... 3
addLabelDf ...................................................... 5
cat.test ......................................................... 5
cbind.mytable ............................................... 6
R topics documented:

centerprint .................................................. 6
changeColnameLabel ...................................... 7
comma .......................................................... 7
compress ........................................................ 8
deleteRows .................................................... 9
densityplot .................................................... 9
evaluateHR .................................................... 10
evaluateKind .................................................. 10
evaluateOR ..................................................... 11
gLabel .......................................................... 11
getMapping ..................................................... 12
HRplot .......................................................... 12
my.chisq.test ................................................... 14
my.t.test ......................................................... 14
mychph ........................................................ 15
mycsv .......................................................... 15
mycsv.cbind.mytable .......................................... 16
mycsv.mytable ................................................ 17
myhtml .......................................................... 17
myhtmlHead .................................................... 18
mylatex ........................................................ 19
mytable ........................................................ 20
mytable2 ....................................................... 21
mytable2df ..................................................... 23
mytable2html ................................................... 23
mytable_df ...................................................... 24
mytable_sub ................................ .................. 25
mytable_sub2 .................................................. 26
num_summary .................................................. 27
obj2linecount .................................................. 27
ORplot .......................................................... 28
ORplot.sub .................................................... 29
p2sig ............................................................ 30
print.cbind.mytable ........................................... 30
print.mytable .................................................. 31
print.mytable.df ............................................. 31
printmytable2 ................................................ 32
r ................................................................. 32
radial ........................................................... 32
rank2group ................................ ..................... 33
reprint .......................................................... 34
space ............................................................ 34
summary.cbind.mytable ....................................... 35
summary.mytable .............................................. 35
validColname .................................................. 36

Index ............................................................ 37
Demographic data of 857 patients with ACS

Description

A dataset containing demographic data and laboratory data of 857 patients with acute coronary syndrome (ACS).

Format

A data frame with 857 rows and 17 variables:

- **age**: patient age in years
- **sex**: "Male" or "Female"
- **cardiogenicShock**: "No" or "Yes"
- **entry**: vascular access route, either "Femoral" or "Radial"
- **Dx**: Final diagnosis, One of the followings: STEMI, NSTEMI or Unstable Angina
- **EF**: ejection fraction, percentage by echocardiography
- **height**: height in centimeter
- **weight**: weight in kilogram
- **BMI**: body mass index in kg/m2
- **obesity**: obesity, "No" or "Yes"
- **TC**: total cholesterol level in mg/dL
- **LDLC**: low density lipoprotein cholesterol level in mg/dL
- **HDLC**: high density lipoprotein cholesterol level in mg/dL
- **TG**: triglyceride level in mg/dL
- **DM**: history of diabetes mellitus,"No" or "Yes"
- **HBP**: history of hypertension,"No" or "Yes"
- **smoking**: history of smoking, One of the followings: "Never", "Ex-smoker", "Smoker"

Description

Change numbers into formatted numbers
addComma

Usage

addComma(x)

## S3 method for class 'mytable'
addComma(x)

## S3 method for class 'mytable.df'
addComma(x)

## S3 method for class 'cbind.mytable'
addComma(x)

## S3 method for class 'data.frame'
addComma(x)

## S3 method for class 'character'
addComma(x)

Arguments

x An object

Methods (by class)

• mytable: S3 method for class mytable
• mytable.df: S3 method for class mytable.df
• cbind.mytable: S3 method for class cbind.mytable
• data.frame: S3 method for class data.frame
• character: S3 method for class character

Examples

## Not run:
require(stringr)
require(magrittr)
require(ggplot2)
mytable(cut~.,data=diamonds) %>% addComma
x=mytable(Dx~sex,data=acs)
addComma(x)

## End(Not run)
addLabelDf

Add value labels to the data.frame

**Description**

Add value labels to the data.frame

**Usage**

```r
addLabelDf(data, mapping = NULL)
```

**Arguments**

- **data**: A data.frame
- **mapping**: Set of aesthetic mappings created by aes or aes_.

---

cat.test

Perform chisq.test or fisher test

**Description**

Perform chisq.test or fisher test

**Usage**

```r
cat.test(x, mode = 1, ...)
```

**Arguments**

- **x**: a numeric vector or matrix. x and y can also both be factors.
- **mode**: An integer. If 1 (default), perform chisq.test first, if 2, perform fisher.test first
- **...**: Further arguments to be passed to chisq.test or fisher.test
cbind.mytable  cbind function for class "mytable"

Description

cbind function for class "mytable"

Usage

## S3 method for class 'mytable'
cbind(..., caption, y = NULL)

Arguments

...  Objects of class "mytable", a result of a call to mytable
caption  Unique values of grouping variables used for column name of table
y  Names of grouping variables used for caption of table

centerprint  Internal mytable functions

Description

Internal mytable functions These are not to be called by the user

Usage

centerprint(x, ..., width = 10)

Arguments

x  a character vector
...  further arguments passed to or from other methods.
width  an integer
**changeColnameLabel**  

*Change column names with labels*

**Description**

Change column names with labels

**Usage**

```r
changeColnameLabel(data)
```

**Arguments**

<table>
<thead>
<tr>
<th>Argument</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>data</td>
<td>A data.frame</td>
</tr>
</tbody>
</table>

**comma**  

*Convert number to formatted number*

**Description**

Convert number to formatted number

**Usage**

```r
comma(x, ...)
```

**Arguments**

<table>
<thead>
<tr>
<th>Argument</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>x</td>
<td>A numeric vector</td>
</tr>
<tr>
<td>...</td>
<td>Further arguments to be passed to function format</td>
</tr>
</tbody>
</table>
Compress an object of class mytable or cbind.mytable

**Description**

Compress an object of class mytable or cbind.mytable

**Usage**

```r
compress(x, no = 2, add.label = TRUE)
```

---

**Arguments**

- `x`: An object of class mytable or cbind.mytable
- `no`: Representative group of two groups
- `add.label`: Logical. Whether or not add representative group name

**Methods (by class)**

- `mytable`: S3 method for class 'mytable'
- `cbind.mytable`: S3 method for class cbind.mytable
- `data.frame`: S3 method for class data.frame

**Examples**

```r
require(stringr)
require(magrittr)
mytable(acs) %>% compress
mytable(Dx~.,data=acs) %>% compress
## Not run:
require(ztable)
mytable(Dx~.,data=acs) %>% compress %>% ztable
mytable(Dx+sex~.,data=acs) %>% compress
## End(Not run)
```
deleteRows

Delete rows of class mytable object

Description
Delete rows of class mytable object

Usage
deleteRows(x, rows)

Arguments
x An object of class mytable or cbind.mytable
rows rows to delete

densityplot
Make Kernel density plot

Description
Make Kernel density plot

Usage
densityplot(formula, data, main = "", xlab = "", ylab = "", ...)

Arguments
formula an R model formula, of the form ~ variable to estimate the unconditional density of variable, or variable ~ factor to estimate the density of variable within each level of factor.
data an optional data frame containing the data.
main main title of plot
xlab label for the horizontal-axis; defaults to the name of the variable x.
ylab label for the vertical axis; defaults to "Density".
... arguments to be passed to plot

Value
This function return NULL invisibly and draw graphs.

Examples
require(moonBook)
data(acs)
densityplot(age~Dx,data=acs)
extractHR  

Extract hazard ratio from a data.frame

Description

Extract hazard ratio from a data.frame

Usage

extractHR(x, digits = 2)

Arguments

x  
an object of class coxph

digits  
An integer indicating the number of decimal places (round) or significant digits to be used. Default value is 2.

Value

a data.frame consist of hazard ratio and 95 the p values.

Examples

require(survival)
data(cancer)
fit=coxph(Surv(time,status)~age+sex+obstruct+perfor,data=colon)
extractHR(fit)

extractKind  

Extract kind of an object of class mytable

Description

Extract kind of an object of class mytable

Usage

extractKind(df)

Arguments

df  
an object of class mytable or cbind.mytable
**extractOR**

*Extract the odds ratios from a S3 object of glm*

**Description**

Extract the odds ratios from a S3 object of glm

**Usage**

```
extractOR(x, digits = 2, method = "default")
```

**Arguments**

- `x`: A S3 object of glm
- `digits`: An integer indicating the number of decimal places (round) or significant digits to be used. Default value is 2.
- `method`: Method to compute confidence interval. Choices are one of c("default","LRT").

**Value**

A data.frame consist of odds ratios and 95 p values

**Examples**

```r
data(cancer,package="survival")
x=glm(status~rx+sex+age+obstruct+nodes,data=colon,family="binomial")
extractOR(x)
```

**getLabel**

*Add column labels to the data.frame*

**Description**

Add column labels to the data.frame

**Usage**

```
getLabel(data, colname, use.column.label = TRUE)
```

**Arguments**

- `data`: A data.frame
- `colname`: character. column name
- `use.column.label`: Logical. Whether or not use column labels.
getMapping

extract variable name from mapping, aes

Description
extract variable name from mapping, aes

Usage
getMapping(mapping, varname)

Arguments
- mapping: aesthetic mapping
- varname: variable name to extract

Value
variable name in character

Examples
require(ggplot2)
mapping=aes(colour=sex)
getMapping(mapping,"colour")
getMapping(mapping,"x")

HRplot

Draw a hazard ratio plot

Description
Draw a hazard ratio plot

Usage
HRplot(out,
        type = 1,
        xlab = "", ylab = "", show.OR = TRUE,
        show.CI = FALSE, sig.level = 1, cex = 1.2, lwd = 2,
Arguments

- **out**
  - An object of class `coxph` or a resultant data.frame of `mycph` function

- **type**
  - An integer indicating the type of plot. Default value is 1

- **xlab**
  - A title for the x axis

- **ylab**
  - A title for the y axis

- **show.OR**
  - A logical vector indicating whether or not show the text indicating the p value

- **show.CI**
  - A logical vector indicating whether or not show the text indicating the confidence interval

- **sig.level**
  - A numeric value of upper limit of p value of showing variables

- **cex**
  - A numerical value giving the amount by which plotting OR/HR symbols should be magnified relative to the default, defaulting 1.2.

- **lwd**
  - The line width, a positive number, defaulting to 2.

- **pch**
  - Either an integer specifying a symbol or a single character to be used as the default in plotting OR/HR points.

- **col**
  - A specification for the default plotting color.

- **...**
  - Arguments to be passed to `plot`

Value

This function return NULL invisibly and draw graphs

Examples

```r
require(survival)
attach(colon)
colon$TS=Surv(time,status==1)
out=mycph(TS~.,data=colon)
out
HRplot(out)
## Not run:
HRplot(out,type=1,pch=2,col=c("blue","red"))
HRplot(out,type=2,show.CI=TRUE,pch=2,cex=2,main="Hazard ratios of all individual variables")
## End(Not run)
```
my.chisq.test  \hspace{1em} \textit{Internal mytable functions}

\section*{Description}
Internal mytable functions These are not to be called by the user

\section*{Usage}
\begin{verbatim}
my.chisq.test(x, y, mydata, catMethod = 2)
\end{verbatim}

\section*{Arguments}
\begin{itemize}
  \item \textbf{x} \hspace{1em} a vector
  \item \textbf{y} \hspace{1em} a vector
  \item \textbf{mydata} \hspace{1em} A data.frame
  \item \textbf{catMethod} \hspace{1em} An integer indicating methods for categorical variables. Possible values in methods are
    \begin{enumerate}
      \item 0 Perform chisq.test first. If warning present, perform fisher test
      \item 1 Perform chisq.test without continuity correction
      \item 2 Perform chisq.test with continuity correction
      \item 3 perform fisher.test
      \item 4 perform prop.trend test
    \end{enumerate}
    Default value is 2.
\end{itemize}

my.t.test  \hspace{1em} \textit{Internal mytable functions}

\section*{Description}
Internal mytable functions These are not to be called by the user

\section*{Usage}
\begin{verbatim}
my.t.test(y, x)
\end{verbatim}

\section*{Arguments}
\begin{itemize}
  \item \textbf{y} \hspace{1em} a vector
  \item \textbf{x} \hspace{1em} a numeric vector
\end{itemize}
mycph

Perform coxph of individual expecting variables

Usage

mycph(formula, data, digits = 2)

Arguments

- formula: An object of class "formula". Left side of ~ must be a variable of class Surv and the right side of ~ must have variables in an additive way.
- data: A data.frame contains data for analysis.
- digits: An integer indicating the number of decimal places (round) or significant digits to be used. Default value is 2.

Value

A data.frame consist of hazard ratio and 95% confidence intervals and the p values.

Examples

```r
require(survival)
data(cancer)
attach(colon)
colon$TS=Surv(time,status==1)
out=mycph(TS~.,data=colon)
out
HRplot(out,type=2,show.CI=TRUE,main="Hazard ratios of all individual variables")
```

mycsv

Export to csv file for class "mytable" or "cbind.mytable"

Description

Export to csv file for class "mytable" or "cbind.mytable"

Usage

mycsv(x, row.names = FALSE, ...)

Arguments

x An object of class "mytable" or "cbind.mytable"
row.names either a logical value indicating whether the row names of x are to be written along with x, or a character vector of row names to be written.
...

Examples

## Not run:
require(moonBook)
res=mytable(sex-age+DM,data=acs)
mycsv(res,file="test.csv")
mycsv(summary(res),file="testsummary.csv")

## End(Not run)
mycsv.mytable  
Export to csv file for class "mytable"

Description

Export to csv file for class "mytable"

Usage

## S3 method for class 'mytable'
mycsv(x, row.names = FALSE, ...)

Arguments

x       An object of class "mytable" a result of a call to mytable
row.names either a logical value indicating whether the row names of x are to be written along with x, or a character vector of row names to be written.
... further arguments passed to or from other methods.

Examples

## Not run:
require(moonBook)
res=mytable(sex~age+DM, data=acs)
mycsv(res,file="test.csv")
mycsv(summary(res),file="testsummary.csv")
mycsv=function(x,row.names=FALSE) UseMethod("mycsv")
## End(Not run)

myhtml  
Export to html file for class "mytable" or "cbind.mytable" of "data.frame"

Description

Export to html file for class "mytable" or "cbind.mytable" of "data.frame"

Usage

myhtml(x, caption = NULL, rownames = TRUE)

## Default S3 method:
myhtml(x, caption = NULL, rownames = TRUE)

## S3 method for class 'mytable'

---

### mycsv.mytable

Export to csv file for class "mytable"

#### Description

Export to csv file for class "mytable"

#### Usage

```r
## S3 method for class 'mytable'
mycsv(x, row.names = FALSE, ...)
```

#### Arguments

- **x**: An object of class "mytable" a result of a call to `mytable`
- **row.names**: either a logical value indicating whether the row names of `x` are to be written along with `x`, or a character vector of row names to be written.
- **...**: further arguments passed to or from other methods.

#### Examples

```r
## Not run:
require(moonBook)
res=mytable(sex~age+DM, data=acs)
mycsv(res,file="test.csv")
mycsv(summary(res),file="testsummary.csv")
mycsv=function(x,row.names=FALSE) UseMethod("mycsv")
## End(Not run)
```

### myhtml

Export to html file for class "mytable" or "cbind.mytable" of "data.frame"

#### Description

Export to html file for class "mytable" or "cbind.mytable" of "data.frame"

#### Usage

```r
myhtml(x, caption = NULL, rownames = TRUE)
```
myhtml(x, caption = NULL, rownames = TRUE)

## S3 method for class 'cbind.mytable'
myhtml(x, caption = NULL, rownames = TRUE)

Arguments

x An object of class "mytable" or "cbind.mytable"
caption A character
rownames A logical value whether or not include rownames in table

Methods (by class)

• default:
• mytable:
• cbind.mytable:

Examples

require(moonBook)
res=mytable(sex~age+Dx,data=acs)
myhtml(res)
res1=mytable(sex+Dx~.,data=acs)
myhtml(res1)
x=head(iris)
myhtml(x)
myhtml(x,caption="Table 1. myhtml Test")
myhtml(x,caption="Table 1. myhtml Test",rownames=FALSE)

myhtmlHead

print my html style

Description

Print my html style

Usage

myhtmlHead()
mylatex

Exporting "cbind.mytable","mytable" to LaTeX format

Description

Exporting "cbind.mytable","mytable" to LaTeX format

Usage

mylatex(
  myobj,
  size = 5,
  caption = NULL,
  caption.placement = "top",
  caption.position = "c"
)

## Default S3 method:
mylatex(
  myobj,
  size = 5,
  caption = NULL,
  caption.placement = "top",
  caption.position = "c"
)

## S3 method for class 'mytable'
mylatex(
  myobj,
  size = 5,
  caption = NULL,
  caption.placement = "top",
  caption.position = "c"
)

## S3 method for class 'cbind.mytable'
mylatex(
  myobj,
  size = 5,
  caption = NULL,
  caption.placement = "top",
  caption.position = "c"
)

Arguments

myobj An object of class 'mytable'
description size An integer indicating font size, defaulting is 5.
caption A character
caption.placement The caption will be have placed at the top of the table if caption.placement is
"top" and at the bottom of the table if it equals "bottom". Default value is "top".
caption.position The caption will be have placed at the center of the table if caption.position is
"center" or "c", and at the left side of the table if it equals "left" or "l", and at the
right side of the table if it equals "right" or "r". Default value is "center".

Methods (by class)

- default: Exporting "cbind.mytable","mytable" to LaTeX format
- mytable: Exporting "cbind.mytable","mytable" to LaTeX format
- cbind.mytable: Exporting "cbind.mytable","mytable" to LaTeX format

Examples

```r
require(moonBook)
out=mytable(sex~.,data=acs)
mylatex(out)
out1=mytable(sex+Dx~.,data=acs)
mylatex(out1,size=6)
```

mytable Produce table for descriptive statistics

Description

Produce table for descriptive statistics by groups for several variables easily. Depending on the nature of these variables, different descriptive statistical methods were used(t-test, ANOVA,Kruskal-Wallis, chisq, Fisher,...)

Usage

```r
mytable(x, ...)
```

## S3 method for class 'formula'
```
mytable(x, ...)
```

## S3 method for class 'data.frame'
```
mytable(x, ...)
```

Arguments

- x An R object, formula or data.frame
- ... arguments to be passed to mytable_sub
mytable2

Methods (by class)

• formula: S3 method for formula
• data.frame: S3 method for data.frame

Examples

mytable(acs)
mytable(~age+sex,data=acs)
mytable(Dx~age+sex+height+weight+TC+TG+HDLC,data=acs,method=3,digits=2)
mytable(am+cyl~.,data=mtcars)
out=mytable(sex~.,data=acs)
out
summary(out)
## Not run:
require(ztable)
ztable(out)
## End(Not run)
mytable(acs)

mytable2

Produce combined table for descriptive statistics

Description

Produce table for descriptive statistics by two grouping variables for several variables easily. De-
pending on the nature of these variables, different descriptive statistical methods were used(t-test,
ANOVA,Kruskal-Wallis, chisq, Fisher,...)

Usage

mytable2(
  formula,
  data,
  use.labels = TRUE,
  use.column.label = TRUE,
  max.ylev = 5,
  maxCatLevel = 20,
  digits = 2,
  method = 1,
  catMethod = 2,
  show.all = FALSE,
  exact = FALSE,
  show.total = FALSE,
  origData = NULL
)
Arguments

formula An object of class "formula". Left side of ~ must contain two grouping variables in an additive way (e.g. sex+group~), and the right side of ~ must have variables in an additive way.

data A data.frame contains data for analysis

use.labels Logical. Whether or not use labels.

use.column.label Logical. Whether or not use column labels.

max.ylev An integer indicating the maximum number of levels of grouping variable (‘y’). If a column have unique values less than max.ylev it is treated as a categorical variable. Default value is 5.

maxCatLevel An integer indicating the maximum number of unique levels of categorical variable. If a column have unique values more than maxCatLevel, categorical summarization will not be performed.

digits An integer indicating the number of decimal places (round) or significant digits to be used. Default value is 1.

method An integer indicating methods for continuous variables. Possible values in methods are

1 forces analysis as normal-distributed
2 forces analysis as continuous non-normal
3 performs a Shapiro-Wilk test to decide between normal or non-normal

Default value is 1.

catMethod An integer indicating methods for categorical variables. Possible values in methods are

0 Perform chisq.test first. If warning present, perform fisher test
1 Perform chisq.test without continuity correction
2 Perform chisq.test with continuity correction
3 perform fisher.test
4 perform prop.trend test

Default value is 2.

show.all A logical value indicating whether or not all statistical values have to be shown in table. Default value is FALSE.

exact A logical value indicating whether or not permit call with approximate parameter. If true, only exact column name permitted. Default value is FALSE.

show.total A logical value indicating whether or not show total group value. Default value is FALSE.

origData A data.frame contains data for analysis

Value

An object of class "cbind.mytable"
mytable2df

Convert mytable object to data.frame

Description
Add N number into data.frame

Usage
mytable2df(x)

Arguments
x An object of class "mytable" a result of a call to mytable

Value
a data.frame with N number

mytable2html

Prepare mytable object to data.frame ready to html

Description
Add N number into data.frame

Usage
mytable2html(x)

Arguments
x An object of class "mytable" a result of a call to mytable

Value
a data.frame with N number
Description

make mytable from data.frame

Usage

mytable_df(
  x,
  use.labels = TRUE,
  use.column.label = TRUE,
  max.ylev = 5,
  maxCatLevel = 20,
  digits = 1,
  method = 1,
  show.all = FALSE
)

Arguments

x A data.frame
use.labels Logical. Whether or not use labels.
use.column.label Logical. Whether or not use column labels.
max.ylev An integer indicating the maximum number of levels of grouping variable. If a column have unique values less than max.ylev it is treated as a categorical variable. Default value is 5.
maxCatLevel An integer indicating the maximum number of unique levels of categorical variable. If a column have unique values more than maxCatLevel, categorical summarization will not be performed.
digits An integer indicating the number of decimal places (round) or significant digits to be used. Default value is 1.
method An integer indicating methods for continuous variables. Possible values in methods are
  1 forces analysis as normal-distributed
  2 forces analysis as continuous non-normal
  3 performs a Shapiro-Wilk test to decide between normal or non-normal
  Default value is 1.
show.all A logical value indicating whether or not all statistical values have to be shown in table. Default value is FALSE.

Value

An object of class "mytable_df". 'print' returns a table for descriptive statistics.
mytable_sub  

Produce table for descriptive statistics

Description

Produce table for descriptive statistics by groups for several variables easily. Depending on the nature of these variables, different descriptive statistical methods were used (t-test, ANOVA, Kruskal-Wallis, chisq, Fisher,...)

Usage

mytable_sub(
  x, 
  data, 
  use.labels = TRUE, 
  use.column.label = TRUE, 
  max.ylev = 5, 
  maxCatLevel = 20, 
  digits = 1, 
  method = 1, 
  catMethod = 2, 
  show.all = FALSE, 
  exact = FALSE, 
  show.total = FALSE, 
  missing = FALSE
)

Arguments

x An object of class "formula". Left side of ~ must contain the name of one grouping variable or two grouping variables in an additive way (e.g. sex+group~), and the right side of ~ must have variables in an additive way.
data A data.frame contains data for analysis
use.labels Logical. Whether or not use labels.
use.column.label Logical. Whether or not use column labels.
max.ylev An integer indicating the maximum number of levels of grouping variable ('y'). If a column have unique values less than max.ylev it is treated as a categorical variable. Default value is 5.
maxCatLevel An integer indicating the maximum number of unique levels of categorical variable. If a column have unique values more than maxCatLevel, categorical summarization will not be performed.
digits An integer indicating the number of decimal places (round) or significant digits to be used. Default value is 1.
method An integer indicating methods for continuous variables. Possible values in methods are
1 forces analysis as normal-distributed
2 forces analysis as continuous non-normal
3 performs a Shapiro-Wilk test to decide between normal or non-normal
Default value is 1.

catMethod An integer indicating methods for categorical variables. Possible values in methods are
0 Perform chisq.test first. If warning present, perform fisher test
1 Perform chisq.test without continuity correction
2 Perform chisq.test with continuity correction
3 perform fisher.test
4 perform prop.trend test
Default value is 2.

show.all A logical value indicating whether or not all statistical values have to be shown in table. Default value is FALSE.

exact A logical value indicating whether or not permit call with approximate parameter. If true, only exact column name permitted. Default value is FALSE.

show.total A logical value indicating whether or not show total group value. Default value is FALSE.

missing A logical value indicating whether or not perform missing data analysis. Default value is FALSE.

Value
An object of class "mytable". 'print' returns a table for descriptive statistics. 'summary' returns a table with all statistical values.

mytable_sub2 Internal mytable functions

Description
Internal mytable functions These are not to be called by the user

Usage
mytable_sub2(
y,
x,
data,
max.ylev = 5,
maxCatLevel = 20,
num_summary

method = 1,
catMethod = 2,
show.total = FALSE,
origData
)

Arguments

y a vector
x a vector
data a data.frame
max.ylev an integer
maxCatLevel an integer
method an integer
catMethod an integer
show.total a logical value
origData a data.frame

num_summary Internal mytable functions

Description

Internal mytable functions These are not to be called by the user

Usage

num_summary(x)

Arguments

x a numeric vector

obj2linecount Internal mytable functions

Description

Internal mytable functions These are not to be called by the user

Usage

obj2linecount(myobj)

Arguments

myobj an R object
ORplot

Plot for odds ratios for a S3 object of glm

Description

Plot for odds ratios for a S3 object of glm

Usage

ORplot(
    x,
    type = 1,
    xlab = "", 
    ylab = "", 
    show.OR = TRUE, 
    show.CI = FALSE, 
    sig.level = 1, 
    cex = 1.2, 
    lwd = 2, 
    pch = 18, 
    col = NULL, 
    ...
)

Arguments

x A S3 object of glm

type an integer defining the shape of plots; default value is 1

xlab label for the horizontal-axis; defaults to "Odds Ratios"

ylab label for the vertical axis; defaults to "".

show.OR A logical value; Whether or not show p values on plot

show.CI A logical value; Whether or not show 95% CI values on plot

sig.level A numeric value of upper limit of p value of showing variables

cex A numerical value giving the amount by which plotting OR/HR symbols should be magnified relative to the default, defaulting 1.2.

lwd The line width, a positive number, defaulting to 2.

pch Either an integer specifying a symbol or a single character to be used as the default in plotting OR/HR points.

col A specification for the default plotting color.

Value

This function return NULL invisibly and draw graphs
ORplot.sub

A sub function for ORplot and HRplot

Description

Plot for odds ratios for a S3 object of glm

Usage

ORplot.sub(
  result,
  type = 1,
  xlab = "",  # label for the horizontal-axis; defaults to "Odds Ratios"
  ylab = "",  # label for the vertical axis; defaults to ""
  show.OR = TRUE,
  show.CI = FALSE,
  sig.level = 1,
  cex = 1.2,
  lwd = 2,
  pch = 18,
  col = NULL,
  ...
)

Arguments

result A resultant data.frame of function extractOR

type an integer defining the shape of plots; default value is 1

xlab A logical value; Whether or not show p values on plot

ylab A logical value; Whether or not show 95% CI values on plot

show.OR A numeric value of upper limit of p value of showing variables
cex         A numerical value giving the amount by which plotting OR/HR symbols should be magnified relative to the default, defaulting 1.2.

lwd         The line width, a positive number, defaulting to 2.

pch         Either an integer specifying a symbol or a single character to be used as the default in plotting OR/HR points.

col         A specification for the default plotting color.

...         Further arguments to be passed to plot

Value

This function returns NULL invisibly and draws graphs

---

p2sig                     Internal mytable functions

Description

Internal mytable functions These are not to be called by the user

Usage

p2sig(value)

Arguments

value               a numeric vector

---

print.cbind.mytable   Print function for class "cbind.mytable"

Description

Print function for class "cbind.mytable"

Usage

## S3 method for class 'cbind.mytable'
print(x, ...)

Arguments

x            an object of class "cbind.mytable", a result of a call to cbind.mytable

...          further arguments passed to or from other methods.
print.mytable

Print function for class "mytable"

Description
Print function for class "mytable"

Usage
## S3 method for class 'mytable'
print(x, ...)

Arguments
x  An object of class "mytable", a result of a call to mytable
...
... further arguments passed to or from other methods.

print.mytable.df

Print an object of mytable.df

Description
Print an object of mytable.df

Usage
## S3 method for class 'mytable.df'
print(x, ...)

Arguments
x  An object of class mytable.df
...
... Further arguments
printmytable2  Internal mytable functions

Description
Internal mytable functions These are not to be called by the user

Usage
printmytable2(obj, digits = 1)

Arguments
obj  an object
digits  an integer

r  Subfunction used in mylatex

Description
Subfunction used in mylatex

Usage
r(string)

Arguments
string  a character vector

radial  Demographic data of 115 patients performing IVUS(intravascular ultrasound) examination of a radial artery.

Description
A dataset containing demographic data and laboratory data of 115 patients performing IVUS(intravascular ultrasound) examination of a radial artery after tansradial coronary angiography.
Format

A data frame with 115 rows and 15 variables:

- **male** if Male, 1; if Female 0
- **age** patient age in years
- **height** height in centimeter
- **weight** weight in kilogram
- **HBP** history of hypertension, 1 for yes or 0 for no
- **DM** history of diabetes mellitus, 1 for yes or 0 for no
- **smoking** history of smoking. One of the followings: "non-smoker","ex-smoker","smoker"
- **TC** total cholesterol level in mg/dL
- **TG** triglyceride level in mg/dL
- **HDL** high density lipoprotein cholesterol level in mg/dL
- **LDL** low density lipoprotein cholesterol level in mg/dL
- **hsCRP** high-sensitive C reactive protein
- **NTAV** normalized total atheroma volume measured by IVUS in cubic mm
- **PAV** percent atheroma volume in percentage
- **sex** Factor with two levels; "Male" or "Female"

---

**rank2group**

*rank2group*  

**Description**

rank a numeric vector and returns a new ordinal vector

**Usage**

`rank2group(y, k = 4)`

**Arguments**

- **y** a numeric vector
- **k** a integer specifies how many groups you want to classify. default value is 4

**Value**

a ordinal vector(numeric) with the same length of y
Examples

```r
require(ggplot2)
data(diamonds)
diamonds$PriceGroup=rank2group(diamonds$price,4)
table(diamonds$PriceGroup)
aggregate(price~PriceGroup, data=diamonds, range)

diamonds$PriceGroup3=rank2group(diamonds$price,3)
table(diamonds$PriceGroup3)
aggregate(price~PriceGroup3, data=diamonds, range)
diamonds$PriceGroup5=rank2group(diamonds$price,5)
table(diamonds$PriceGroup5)
aggregate(price~PriceGroup5, data=diamonds, range)
```

---

### reprint

**Internal mytable functions**

**Description**

Internal mytable functions These are not to be called by the user

**Usage**

```r
reprint(x, times)
```

**Arguments**

- `x` a character vector
- `times` an integer

---

### space

**Internal mytable functions**

**Description**

Internal mytable functions These are not to be called by the user

**Usage**

```r
space(num)
```

**Arguments**

- `num` an integer
### summary.cbind.mytable

**Summarizing function for class "cbind.mytable"**

#### Description

Summarizing function for class "cbind.mytable"

#### Usage

```r
## S3 method for class 'cbind.mytable'
summary(object, ...)
```

#### Arguments

- **object**: An object of class "cbind.mytable", a result of a call `mytable`
- **...**: further arguments passed to or from other methods.

#### Examples

```r
out = mytable(am + cyl ~ ., data = mtcars)
summary(out)
```

---

### summary.mytable

**Summarizing function for class "mytable"**

#### Description

Summarizing function for class "mytable"

#### Usage

```r
## S3 method for class 'mytable'
summary(object, ...)
```

#### Arguments

- **object**: An object of class "mytable", a result of a call `mytable`
- **...**: further arguments passed to or from other methods.

#### Examples

```r
out = mytable(am ~ ., data = mtcars)
summary(out)
```
validColname | Find valid string among character vector from approximate string

**Description**

Find valid string among character vector from approximate string

**Usage**

validColname(pattern, x)

**Arguments**

- **pattern** character string to be matched in the given character
- **x** a character vector where matches are sought

**Value**

returns NA in case of no matched string found or a character string in string vector x

**Examples**

a="dx"
b=c("Age","Sex","Dx")
validColname(a,b)
Index

acs, 3
addComma, 3
addLabelDf, 5
cat.test, 5
cbind.mytable, 6, 30
centerprint, 6
changeColnameLabel, 7
coma, 7
compress, 8
deleteRows, 9
densityplot, 9
extractHR, 10
extractKind, 10
extractOR, 11
getLabel, 11
getMapping, 12
HRplot, 12
my.chisq.test, 14
my.t.test, 14
mycph, 15
mycsv, 15
mycsv.cbind.mytable, 16
mycsv.mytable, 17
myhtml, 17
myhtmlHead, 18
mylatex, 19
mytable, 6, 16, 17, 20, 23, 31, 35
mytable2, 21
mytable2df, 23
mytable2html, 23
mytable_df, 24
mytable_sub, 20, 25
mytable_sub2, 26
num_summary, 27
obj2linecount, 27
ORplot, 28
ORplot.sub, 29
p2sig, 31
print.cbind.mytable, 30
print.mytable, 31
print.mytable.df, 31
printmytable2, 32
r, 32
radial, 32
rank2group, 33
reprint, 34
space, 34
summary.cbind.mytable, 35
summary.mytable, 35
validColname, 36