# Package ‘nse2r’

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**Type**  Package

**Title**  Fetch Data from 'National Stock Exchange (India)'

**Version**  0.1.5

**Description**  Fetch data related to stocks, index, futures & options from the 'NSE (National Stock Exchange, India)'. This package is community maintained and is not officially supported by 'NSE'. The accuracy of data is only as correct as provided on <https://www.nseindia.com>.

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**URL**  https://github.com/rsquaredacademy/nse2r,

https://nse2r.rsquaredacademy.com/

**BugReports**  https://github.com/rsquaredacademy/nse2r/issues

**Depends**  R(>= 3.3)

**Imports**  httr, jsonlite, magrittr, rvest, utils, xml2

**Suggests**  covr, DT, httptest, shiny, shinyBS, shinycssloaders, shinythemes, testthat (>= 2.1.0)

**Encoding**  UTF-8

**RoxygenNote**  7.1.1

**NeedsCompilation**  no

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**R topics documented:**

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**Description**

Tools for Collecting Real Time Data from National Stock Exchange (India)

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**nse_advances_declines**  Advances & Declines

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**Description**

NSE indices advances & declines.

**Usage**

nse_advances_declines(clean_names = TRUE)

**Arguments**

- **clean_names** Logical; if TRUE, makes the column names descriptive and uses snake_case.

**Value**

A tibble with the following columns:

- **index_name** Name of the index.
- **advances** Number of stocks increased (in green).
- **declines** Number of stocks decreased (in red).
- **unchanged** Number of stocks unchanged.
\textit{nse\_app}

\textbf{Examples}

\begin{verbatim}
  nse_advances_declines()
  # retain original column names as returned by NSE
  nse_advances_declines(clean_names = FALSE)
\end{verbatim}

\textbf{Description}

Launches shiny app for fetching data from NSE.

\textbf{Usage}

\begin{verbatim}
  nse_app()
\end{verbatim}

\textbf{Examples}

\begin{verbatim}
  ## Not run:
  nse_app()
  ## End(Not run)
\end{verbatim}

\textit{nse\_fo}

\textbf{Top F&O gainers and losers}

\textbf{Description}

Top futures and options gainers and losers for the last trading session.

\textbf{Usage}

\begin{verbatim}
  nse_fo_top_gainers(clean_names = TRUE)
  nse_fo_top_losers(clean_names = TRUE)
\end{verbatim}

\textbf{Arguments}

\begin{verbatim}
  clean_names Logical; if TRUE, makes the column names descriptive and uses snake_case.
\end{verbatim}
Value

A tibble with the following columns:

- `symbol`: NSE ticker.
- `series`: Equity (EQ).
- `last_corp_announcement_date`: Last corporate announcement date.
- `last_corp_announcement`: Last corporate announcement.
- `open_price`: Open price.
- `high_price`: High price.
- `low_price`: Low price.
- `last_traded_price`: Last traded price.
- `prev_close_price`: Previous close price.
- `percent_change`: Percentage change in price.
- `traded_quantity`: Total traded quantity.
- `turnover`: Turnover in lakhs.

Examples

```r
# top gainers
nse_fo_top_gainers()

# retain original column names as returned by NSE
nse_fo_top_gainers(clean_names = FALSE)

# top losers
nse_fo_top_losers()

# retain original column names as returned by NSE
nse_fo_top_losers(clean_names = FALSE)
```

---

**nse_index_list**  
**Index list**

Description

List NSE indices.
Usage
nse_index_list(clean_names = TRUE)

Arguments

   clean_names Logical; if TRUE, makes the column names descriptive and uses snake_case.

Value

A tibble with the following column:

   index_name Name of the index.

Examples

   nse_index_list()

   # retain original column names as returned by NSE
   nse_index_list(clean_names = FALSE)

Description

Fetch the quote for a given index.

Usage
nse_index_quote(clean_names = TRUE)

Arguments

   clean_names Logical; if TRUE, makes the column names descriptive and uses snake_case.

Value

A tibble with the following columns:

   index_name Name of the NSE indices.
   last_traded_price Last traded price.
   change Change in price.
   percent_change Percentage change in price.
nse_stock_code

Examples

nse_index_quote()

# retain original column names as returned by NSE
nse_index_quote(clean_names = FALSE)

nse_index_valid

Validate index symbol.

Description

Check if index symbol is valid.

Usage

nse_index_valid(index_code)

Arguments

index_code Symbol of the index.

Examples

nse_index_valid("nifty auto")
nse_index_valid("nifty cps")

nse_stock_code

Stock code

Description

Fetch stock symbol and name from NSE.

Usage

nse_stock_code(clean_names = TRUE)

Arguments

clean_names Logical; if TRUE, makes the column names descriptive and uses snake_case.
nse_stock_high_low

Value

A tibble with the following columns:

- symbol: NSE ticker.
- company: Name of the firm.

Examples

nse_stock_code()

# retain original column names as returned by NSE
nse_stock_code(clean_names = FALSE)

---

nse_stock_high_low  52 week high & low

Description

Fetch stocks that have touched their 52 week high and low.

Usage

nse_stock_year_high(clean_names = TRUE)

nse_stock_year_low(clean_names = TRUE)

Arguments

- clean_names: Logical; if TRUE, makes the column names descriptive and uses snake_case.

Value

A tibble with the following column names:

- symbol: NSE ticker.
- symbol_desc: Name of the firm.
- date: Previous high date.
- new_high: New 52 week high price.
- new_low: New 52 week low price.
- year: Year.
- last_traded_price: Last traded price.
- prev_high: Previous high price.
nse_stock_most_traded

prev_low  Previous low price.
prev_close Previous close price.
change    Change in price.
percent_change Percentage change in price.

Examples

# 52 week high
nse_stock_year_high()

# retain original column names as returned by NSE
nse_stock_year_high(clean_names = FALSE)

# 52 week low
nse_stock_year_low()

# retain original column names as returned by NSE
nse_stock_year_low(clean_names = FALSE)

nse_stock_most_traded  Most actively traded stocks

Description

Fetch most actively traded stocks in a month on NSE.

Usage

nse_stock_most_traded(clean_names = TRUE)

Arguments

clean_names  Logical; if TRUE, makes the column names descriptive and uses snake_case.

Value

A tibble with the following columns:

security  Name of the firm.
share_turnover Share in total turnover (percentage).
traded_quantity Total traded quantity (in lakhs)
no_of_trades  Number of trades.
avg_daily_turnover Average daily turnover (in crores).
turnover    Turnover (in crores.)
Examples

```r
nse_stock_most_traded()

# retain original column names as returned by NSE
nse_stock_most_traded(clean_names = FALSE)
```

---

```r
nse_stock_quote

Stock quote

Description
Fetch the quote for a given stock code from Yahoo Finance API or Rediff Money.

Usage

```r
nse_stock_quote(stock_code, source = c("yahoo", "rediff"))
```

Arguments

- `stock_code`: Symbol of the stock.
- `source`: Yahoo Finance API or Rediff Money.

Examples

```r
nse_stock_quote("infy")
nse_stock_quote("infy", source = "rediff")
```

---

```r
nse_stock_top_base

NSE top gainers & losers

Description
Fetch top gainers and losers for the last trading session.

Usage

```r
nse_stock_top_gainers(clean_names = TRUE)
nse_stock_top_losers(clean_names = TRUE)
```
Arguments

clean_names Logical; if TRUE, makes the column names descriptive and uses snake_case.

Value

A tibble with the following columns:

- **symbol**: NSE ticker.
- **series**: Equity (EQ).
- **last_corp_announcement_date**: Last corporate announcement date.
- **last_corp_announcement**: Last corporate announcement.
- **open_price**: Open price.
- **high_price**: High price.
- **low_price**: Low price.
- **last_traded_price**: Last traded price.
- **prev_close_price**: Previous close price.
- **percent_change**: Percentage change in price.
- **traded_quantity**: Total traded quantity.
- **turnover**: Turnover in lakhs.

Examples

```r
# top gainers
nse_stock_top_gainers()

# retain original column names as returned by NSE
nse_stock_top_gainers(clean_names = FALSE)

# top losers
nse_stock_top_losers()

# retain original column names as returned by NSE
nse_stock_top_losers(clean_names = FALSE)
```
**nse_stock_valid**

**Validate stock symbol**

**Description**
Check if stock symbol/ticker is valid.

**Usage**

\[
\text{nse\_stock\_valid(stock\_code)}
\]

**Arguments**

- **stock\_code**
  Symbol of the stock.

**Examples**

\[
\text{nse\_stock\_valid("infy")}
\]

\[
\text{nse\_stock\_valid("glo")}
\]

---

**preopen\_nifty**

**Pre Open market data**

**Description**
Fetch data of pre open session of Nifty & Nifty Bank.

**Usage**

\[
\text{nse\_preopen\_nifty(clean\_names = TRUE)}
\]

\[
\text{nse\_preopen\_nifty\_bank(clean\_names = TRUE)}
\]

**Arguments**

- **clean\_names**
  Logical; if TRUE, makes the column names descriptive and uses snake_case.
Value

A tibble with the following columns:

- **symbol**: NSE ticker.
- **series**: Equity (EQ)
- **corp_action_date**: Corporate action date.
- **corp_action**: Corporate Action
- **price**: Price
- **change**: Change in price
- **percent_change**: Percentage change in price.
- **prev_close**: Previous close.
- **quantity**: Quantity
- **value**: Value (in lakhs),
- **mkt_cap**: Free float market capitalization (in crores).
- **year_high**: Normal market 52 week high.
- **year_low**: Normal market 52 week low.

Examples

```r
# nifty
nse_preopen_nifty()

# retain original column names as returned by NSE
nse_preopen_nifty(clean_names = FALSE)

# nifty bank
nse_preopen_nifty_bank()

# retain original column names as returned by NSE
nse_preopen_nifty_bank(clean_names = FALSE)
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