Package ‘rtern’

April 28, 2021

Title  A Ternary Conditional Operator for R
Version  0.1.1
Description  A small language extension for succinct conditional assignment using ‘?’ and ‘:’, emulating the conditional ternary operator syntax using in C, Java, JavaScript and other languages.
License  MIT + file LICENSE
Encoding  UTF-8
RoxygenNote  7.1.1
URL  https://github.com/grddavies/rtern
BugReports  https://github.com/grddavies/rtern/issues
Suggests  covr, testthat (>= 3.0.0), spelling
Config/testthat/edition  3
Language  en-US
Imports  utils, lifecycle
NeedsCompilation  no
Author  Gethin Davies [aut, cre]
Maintainer  Gethin Davies <grd.davies@gmail.com>
Repository  CRAN
Date/Publication  2021-04-28 14:10:02 UTC

R topics documented:

? .......................................................... 2
Index  ..................................................... 4
Succinct conditional evaluation and assignment

Description

[Experimental]

? is an in-line if/else operator

Usage

lhs ? rhs

Arguments

lhs A logical expression, vector or matrix.
rhs A pair of values separated by a colon i.e. value_if_true : value_if_false.

Details

The syntax for ? is as follows:

condition ? value_if_true : value_if_false

The condition is evaluated TRUE or FALSE as a Boolean expression. On the basis of the evaluation of the Boolean condition, the entire expression returns value_if_true if condition is true, but value_if_false otherwise. In the case where the condition is a vector/matrix of Boolean values, the function returns a vector/matrix where each element is either value_if_true or value_if_false based on the truthiness of the elements of the logical matrix on the left-hand side.

Who has time for if/else?

Value

One of the values in rhs, depending on the truthiness of lhs.

Examples

# Conditional evaluation
4 > 3 ? "it_was_true":"it_was_false"
# > "it_was_true"

FALSE ? "it_was_true":"it_was_false"
# > "it_was_false"

# Vectorised evaluation
c(4, 2) < 3 ? "it_was_true":"it_was_false"
# > "it_was_false" "it_was_true"

# Conditional assignment with `<-`
x <- 4 > 3 ? "it_was_true":"it_was_false"
x
# > "it_was_true"

# Conditional assignment with `=`
y <- 3 > 4 ? "it_was_true" : "it_was_false"
y
# > "it_was_false"

# Chaining `?` statements
z <- FALSE ? "true" : (FALSE ? "false, true" : (TRUE ? "false, false, true" : "all false"))
z
# > "false, false, true"
Index

?, 2