Package: lookup (via r-universe)

September 15, 2024

Type Package

Title Functions Similar to VLOOKUP in Excel

Version 1.0

Description Simple functions to lookup items in key-value pairs. See Mehta (2021) <doi:10.1007/978-1-4842-6613-7_6>.

License MIT + file LICENSE

URL https://kwstat.github.io/lookup/

BugReports https://github.com/kwstat/lookup/issues

Suggests knitr, rmarkdown, testthat (>= 3.0.0)

VignetteBuilder knitr

Config/testthat/edition 3

Encoding UTF-8

Language en-US

RoxygenNote 7.3.2

Repository https://kwstat.r-universe.dev

RemoteUrl https://github.com/kwstat/lookup

RemoteRef HEAD

RemoteSha 44fe342978eeaaafe7d2bf5d2e1767c0932c680f

Contents

lookup *Lookup items in key-value pairs of vectors*

Description

This is a simple wrapper to the match function.

Usage

```
lookup(x, key, value, nomatch = NA)
```

Arguments

x	Vector of items to lookup in key-value pairs.
key	Vector of keys that are searched.
value	Vector of values to be returned.
nomatch	The value to be returned in the case when no match is found. Note that it is coerced to integer.

Details

Search for elements of x in key and return the corresponding element of value. If no match is found, return nomatch.

Value

A vector the same length as x, but containing the values of value. If x[i] is equal to key[j], then the value returned in the ith position of the vector is value[j]. If no match is found, NA is returned.

Author(s)

Kevin Wright

Examples

```
# Example 1.  A and B have different factor levels
A <- factor(c("A","E","F"))
B <- factor(c("E","F","G"))
v <- c(4,2,0)
lookup(A,B,v)

# Example 2.  Merge treatment means back into the raw data
dat <- data.frame(Trt = rep(LETTERS[1:5],2),
                  x=round(rnorm(10),2))
# Treatment B is missing all values, treatment D missing one value
dat$x[dat$Trt=="B"] <- NA
dat$x[4] <- NA
# Calculate treatment means
```

```
TrtMean <- tapply(dat$x, dat$Trt, mean, na.rm=TRUE)
TrtMean
# Merge the means into the original data
dat$TrtMean <- lookup(dat$Trt, names(TrtMean), TrtMean)
```

---

vlookup *Lookup items in key-value dataframe similar to Excel's vlookup function*

Description

This is a simple wrapper to the match function.

Usage

```
vlookup(x, data, key, value, nomatch = NA)
```

Arguments

x	Vector of items to lookup in key-value pairs.
data	Dataframe containing key-value columns.
key	Vector of keys that are searched.
value	Vector of values to be returned.
nomatch	The value to be returned in the case when no match is found. Note that it is coerced to integer.

Details

Search for elements of x in dataframe data, column key, and return the corresponding element of column value. If no match is found, return nomatch.

Value

A vector the same length as x, but containing the values of value. If x[i] is equal to key[j], then the value returned in the ith position of the vector is value[j]. If no match is found, NA is returned.

Author(s)

Kevin Wright

Examples

```
# Example 1.  A and B have different factor levels
A <- factor(c("A","E","F"))
dat <- data.frame(trt = factor(c("E","F","G")),
                  val = c(4,2,0))
vlookup(A,dat, "trt", "val")
```

Index