Package ‘FRACTION’
February 19, 2015

Type Package
Title Numeric number into fraction
Version 1.0
Date 2012-05-13
Author OuYang Ming <oula2004@163.com>
Maintainer OuYang Ming <oula2004@163.com>
Description This is the package which can help you turn numeric, dataframe, matrix into fraction form.
License GPL-2
Repository CRAN
Date/Publication 2012-07-20 14:08:18

R topics documented:

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Description

This is the package which can help you turn numeric, dataframe, matrix into fraction form.

Details
Author(s)

OuYang Ming Maintainer: OuYang Ming <oula2004@163.com>

References

Friedrich Leisch, 2008 Creating R packages: A Tutorial Zhang Jinlong, How to create R package under Windows FAQ in R-PROJECT

Examples

```r
r=8
is.wholenumber(r)

a=14
b=32
c=gcd(a,b)
x=1/6
fra(x)
y=c(1/2,1/3,1/9)
fra.m(y)
z=data.frame(1/2)
fra.m(z)
q=matrix(1)
fra.m(q)
```

Description

to turn numeric number into fraction form

Usage

```r
fra(x, j = 7)
```

Arguments

- `x`: a numeric number
- `j`: Decimal digits default is 7
fra.m

Value

Return a charcter which shows the fraction equals x, x is a number

Author(s)

OuYang Ming

References

Friedrich Leisch, 2008 Creating R packages: A Tutorial
Zhang Jinlong, How to create R package under Windows

Examples

x=1/3
fra(x)

Description

to turn vector, data.frame, matrix into fraction form

Usage

fra.m(x)

Arguments

x Vector, matrix or data.frame which contains numeric number

Value

Return a charcter which shows the fraction equals x, x is a data.frame or matrix or vector

Author(s)

OuYang Ming

References

Friedrich Leisch, 2008 Creating R packages: A Tutorial
Zhang Jinlong, How to create R package under Windows
Examples

```r
y = c(1/2, 1/3, 1/9)
fra.m(y)
z = data.frame(1/2)
fra.m(z)
q = matrix(1)
fra.m(q)
```

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gcd  
*Greatest common divisor*

Description

Calculate the greatest common divisor between two numbers

Usage

```r
gcd(a, b)
```

Arguments

- **a**: a is greater than 0 while a is whole number
- **b**: b is greater than 0 while b is whole number

Details

Uses Euclidean algorithm

Value

The greatest common divisor between a and b

Author(s)

OuYang Ming

References

Friedrich Leisch, 2008 Creating R packages: A Tutorial Zhang Jinlong, How to create R package under Windows FAQ in R-PROJECT

Examples

```r
a = 14
b = 32
c = gcd(a, b)
```
is.wholenumber  

To judge the number is whole number or not

Description

To judge the number is whole number or not

Usage

```r
is.wholenumber(x, tol = .Machine$double.eps^0.5)
```

Arguments

- `x`  
  x is a numeric number

- `tol`  
  Define in function

Value

Return TRUE or FALSE to judge x is whole number or not

Author(s)

OuYang Ming

References

Friedrich Leisch, 2008 Creating R packages: A Tutorial  
Zhang Jinlong, How to create R package under Windows FAQ in R-PROJECT

Examples

```r
r=8  
is.wholenumber(r)
```
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