

Package ‘FRACTION’

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Type Package

Title Numeric Number into Fraction

Version 1.1.1

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Description Turn numeric,data.frame,matrix into fraction form.

License GPL-2

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FRACTION-package	<i>Numeric Number into Fraction</i>
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Description

Turn numeric,data.frame,matrix into fraction form.

Details

Package: FRACTION
Type: Package
Version: 1.1.1
Date: 2023-08-21
License: licenseInfo

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=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)
```

fra

FRACTION for number

Description

to turn numeric number into fraction form

Usage

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

Arguments

x a numeric number
j Decimal digits default is 7

Value

Return a character 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)
```

fra.m

FRACTION for vector, matrix or data.frame

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 character 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

```
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)
```

gcd

Greatest common divisor

Description

Calculate the greatest common divisor between two numbers

Usage

```
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

```
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

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

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