Package 'tableSMY'

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Type Package

Title A Simple Toolbox that Allows Quick Visualization of your Matrix or Dataframe

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Description This tools contain 5 functions that allow users to quickly visualize their matrix/dataframe/datatable and remove incomplete cells.

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Imports utils, stats, grid, pheatmap

R topics documented:

`tableSMY-package` *A Simple Toolbox that Allows Quick Visualization of your Matrix or Dataframe*

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This tools contain 5 functions that allow users to quickly visualize their matrix/dataframe/datatable and remove incomplete cells.

Details

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Author(s)

Peter I-Fan Wu

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anyIncomplete *Check Incompletion*

Description

Check if your matrix/dataframe/datatable has any Incompletion (NA, NULL, NaN, "") and return the statistics of them

Usage

```
anyIncomplete(table)
```

Arguments

table	A matrix/dataframe/datatable

Author(s)

Peter I-Fan Wu

Examples

```
set.seed(101)
random.matrix=matrix(runif(500, min = -1, max = 1), nrow = 50)
graphTable(random.matrix)

set.seed(101)
random.matrix[sample(1:50,10),sample(1:10,2)]=NA
graphTable(random.matrix)

anyIncomplete(random.matrix)
```

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changeNames *Change rol/col names*

Description

Change rownames or colnames of a matrix/dataframe/datatable based on another matrix/dataframe/datatable

Usage

```
changeNames(rowOrCol, Table, nameForTable)
```

Arguments

rowOrCol	Whether it's the row or col names that need to be changed
Table	A matrix/dataframe/datatable
nameForTable	A 2 column matrix/dataframe/datatable: 1st column/row: original names; 2nd column/row: new names

Author(s)

Peter I-Fan Wu

Examples

```
Table=matrix(rnorm(2*3),ncol=2,nrow=3)
  rownames(Table)=c("one","two","three")
  colnames(Table)=c("col_one","col_two")
  Table


  rowNameForTable=matrix(c("two","one","three","TWO","ONE","THREE"),ncol=2,byrow=FALSE)
  colNameForTable=matrix(c("col_two","col_one","COL_TWO","COL_ONE"),ncol=2,byrow=FALSE)

 #newTable=changeNames(rowOrCol="test",Table,nameForTable) #test the error message of the function
  newTable=changeNames(rowOrCol="row",Table,rowNameForTable) #test rownames
  newTable=changeNames(rowOrCol="col",Table,colNameForTable) #test colnames
```

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checkDuplicates_vect *Check items that occur more than once*

Description

Check if a vector has any items that occur more than once and return a frequency table.

Usage

```
checkDuplicates_vect(vect)
```

Arguments

vect	Any types of vector in R

Author(s)

Peter I-Fan Wu

Examples

```
checkDuplicates_vect(c(1,1,2,3,4,4,4,5,6,7,8,9,10))
```

filterTable *Generate quick visualization of your matrix/dataframe and filter any NA/NULL/""*

Description

This package aims to provide neat small functions that can be used to clean and visualize tabular data.

Usage

```
filterTable(table)
```

Arguments

table	A matrix/dataframe/datatable

Author(s)

Peter I-Fan Wu

Examples

```
set.seed(101)
random.matrix=matrix(runif(500, min = -1, max = 1), nrow = 50)

set.seed(101)
random.matrix[sample(1:50,10),sample(1:10,2)]=NA

filtered_random.matrix=filterTable(random.matrix)
str(filtered_random.matrix)
```

graphTable *Draw a heat map of your matrix/dataframe/datatable*

Description

Draw a heat map that gives intuitive overview of your matrix/dataframe/datatable.

Usage

```
graphTable(table)
```

Arguments

table	A matrix/dataframe/datatable

Author(s)

Peter I-Fan Wu

Examples

```
mat=matrix(c(1,2,3,4,5,6),ncol=2)
graphTable(mat)

set.seed(101)
random.matrix=matrix(runif(500, min = -1, max = 1), nrow = 50)
graphTable(random.matrix)

set.seed(101)
random.matrix[sample(1:50,10),sample(1:10,2)]=NA
graphTable(random.matrix)
```

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