

Package: collUtils (via r-universe)

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Type Package

Title Auxiliary Package for CollapsABEL

Version 1.0.4

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Description This package includes some low level functions for processing PLINK input and output files.

License GPL-3

Depends R (>= 3.1.3), rJava (>= 0.9-6), Rcpp (>= 0.11.2)

LinkingTo Rcpp

URL <https://bitbucket.org/kindlychung/collutils>

BugReports <https://bitbucket.org/kindlychung/collutils/issues>

Suggests testthat

SystemRequirements Java (>= 1.6)

Repository <https://kindlychung.r-universe.dev>

RemoteUrl <https://bitbucket.org/kindlychung/collutils>

RemoteRef HEAD

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collUtils-package *A auxiliary package for CollapsABEL.*

Description

This package includes some low level functions for processing PLINK input and output files written in Java or C++. Normally you shouldn't need to directly use functions from this package.

Details

Package: collUtils
Type: Package
Version: 1.0
Date: 2015-06-12
License: GPL-3

Author(s)

Kaiyin Zhong Maintainer: Kaiyin Zhong <kindlychung@gmail.com>

References

To be updated.

Examples

```
## Not run:
require(collUtils)
rbed_obj = rBed("test.bed")
geno = rbed_obj$readBed()
geno = getJArray(geno)
print(geno)
fn = tempfile()
f = file(fn, "wb")
writeBin("a", f)
writeBin("b", f)
writeBin("c", f)
close(f)
file.info(fn)$size == 6
truncateEndOfFile(fn, 1)

## End(Not run)
```

countlines	<i>Count the number of lines in a file</i>
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Description

Count the number of lines in a file

Usage

```
countlines(fn)
```

Arguments

fn	Input filepath
----	----------------

Value

A integer for the number of lines

getJArray	<i>Import Java array into R</i>
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Description

A thin wrapper around `rJava:::jevalArray`

Usage

```
getJArray(mat_ref, na_vals = -9)
```

Arguments

mat_ref	Reference object of the Java array
na_vals	NA code. Default to -9.

Author(s)

Kaiyin Zhong

ncols	<i>Counts the number of columns of whitespace delimited file.</i>
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Description

Counts the number of columns of whitespace delimited file.

Usage

```
ncols(fn)
```

Arguments

fn	Input filepath
----	----------------

Value

A integer for the number of columns

rBed	<i>Wrapper for constructor of Bed class</i>
------	---

Description

Wrapper for constructor of Bed class

Usage

```
rBed.bed_path, bytes_snp = NULL, nindiv = NULL)
```

Arguments

bed_path	character. Path to bed file.
bytes_snp	integer. Bytes per SNP.
nindiv	integer. Number of individuals.

Value

jobRef object.

Author(s)

Kaiyin Zhong

Examples

```
## do not run
# rbed_obj = rBed("test.bed")
# geno = rbed_obj$readBed()
# geno = getJArray(geno)
# print(geno)
```

readcol	<i>Read one column of a whitespace delimited text file</i>
---------	--

Description

Read one column of a whitespace delimited text file

Usage

```
readcol(fileName, colNum, nSkip, maxRowNum)
```

Arguments

fileName	Input filepath
colNum	An integer. The target column number
nSkip	An integer. Number of lines to skip in the beginning.
maxRowNum	An Integer. Maximum number of lines to read

Value

A vector of strings containing the target column

readcols	<i>Read columns of a whitespace delimited text file</i>
----------	---

Description

Read columns of a whitespace delimited text file

Usage

```
readcols(fn, colsel, nFirstSkipLines, nSkipUnit)
```

Arguments

fn	input filepath
colsel	a vector of target column numbers
nFirstSkipLines	Integer. Number of lines to skip in the beginning
nSkipUnit	Integer M. Let the function read one line out of every M

Value

A matrix of strings from selected columns

truncateEndOfFile	<i>Truncate n bytes from end of file</i>
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Description

Truncate n bytes from end of file

Usage

```
truncateEndOfFile(filename, len)
```

Arguments

filename	character. Filename.
len	numeric. Number of bytes to truncate

Author(s)

Kaiyin Zhong

Examples

```
## Not run:  
fn = tempfile()  
f = file(fn, "wb")  
writeBin("a", f)  
writeBin("b", f)  
writeBin("c", f)  
close(f)  
file.info(fn)$size == 6  
truncateEndOfFile(fn, 1)  
file.info(fn)$size == 5  
  
## End(Not run)
```

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