

sortSKit v1.5 manual
(Documentation for R function)

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Description

Function *sortSKit* was primarily intended to create an alternative option to sort data files for the Survival Kit (Ducrocq and Sölkner, 1998), when using the COX program. Later it was extended to sort text files with sorting criteria up to three columns (both ascending and descending order).

Usage

```
sortSKit(inputFile, outputFile = "sorted.txt", mode = "default",
         strata = 0, order1 = 0, order2 = 0, order3 = 0,
         wdNew = " ", wdSetBack = TRUE)
```

Arguments

input_file

The name of the file needs to be sorted (for example: "tosort.txt"). Must exist in the R working directory.

output_file

The name of the sorted file created by the function. If this file already exists, it will be overwritten without any further warning! If no filename is specified, an output file "sorted.txt" will be created.

mode

There are two possibilities:

- "*default*" Column numbers for sorting specified by the user. If no *mode* is specified, this option will be used.
- "*cox*" This sorts the *input_file* according to the requirements of the Survival Kits' COX program, without need to specify anything else. Use the *strata* keyword in case of stratified survival analysis.

order1, order2, order3

User defined numbers corresponding to columns to be sorted. A positive to value results to an ascending, a negative value to a descending sort. These statements work only in the "*default*" mode.

strata

Sets the number of column for the strata variable required if STRATA statement is used in the COX program (check Survival Kit manual for details). This statement works only in the "cox" mode. If you need to sort for one column only, use keyword *order1* instead.

wdNew

Sets the R working directory to one specified by the user (for example: "C:/newDirectory").

wdSetBack

If FALSE is specified here, the R working directory remains the same as set in *wdNew*.

Common problems

- R is case sensitive (i.e. $a \neq A$)!
- When using keywords *input_file*, *output_file*, *mode* or *wdNew* the double quotation marks " " marks are needed.
- The "cannot allocate vector of size..." error message is related to memory limitations of R. For solving this problem consult the R help (type: help(memory.size)), or try to sort with Linux "sort" command.
- For new working directory definition in *wdNew* the / sign should be used instead of Windows standard \.
- If the "cannot change working directory" message appears, check the path specified with keyword *wdNew*.
- The working directory could be set back manually at any time in R with command: setwd("c:/anyDirectoryYouWant")

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References

Ducrocq V., Sölkner J. 1998. "The Survival Kit V3.0" A package for large analyses of survival data. In: Proc. 6th World Congr. Genet. Appl. Livest. Prod. 27, 447-448

Examples

Works

```
# input_file "small2.dat" sorted by column 1 (ascending).
sortSKit("small2.dat",order1=1)
```

```
# input_file sorted according to requirements of COX in the Survival Kit
# column1 descending, column2 ascending (no stratification assumed).
# The output file is "small2s.dat".
sortSKit("small2.dat", "small2s.dat", mode="cox")
```

```
# The same as in previous case using the "default" mode.
# Sorted by column1 descending, column2 ascending.
sortSKit("small2.dat", "small2s.dat", order1=-1, order2=2)
```

Does not work

```
# No sorting order specified
sortSKit("small2.dat")
```

```
# Keyword order1 used in "cox" mode
sortSKit("small2.dat", mode="cox", order1=-5)
```

```
# Keyword strata used in "default" mode
sortSKit("small2.dat", order1=2, strata=4)
```