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| --- | --- | --- | --- |
| getwd() | get working directory | > | greater than |
| setwd() | set working directory | < | less than |
| dir.create() | create a new sub-directory | ! | NOT |
| list.files() dir() | list files in current directory file | >= | greater than or equal to |
| info() | .access basic system info about file | <= | less than or equal to |
| file.copy() | copy a file | == | is equal to |
| file.rename() | rename a file | sqrt(x) | square root of x |
| ls() | list objects in your workspace | log(x) | the natural logarithm of x |
| rm() | remove an object from your workspace | exp(x) | exponential value of x |
| ?mean | help on the mean function | log10(x) | base 10 log of x |
| help(package=“mean”) | another way to get help about the mean function • or simply help(mean) | log(x, base) | base log of x |
| help.search(“mean”) | search for help topics containing “mean” | max(x)  min(x) | largest element of x smallest element of x |
| RSiteSearch(“mean”) | search cran.r-project.org | sum(x) | sum of elements in x |
| CRAN | The Comprehensive R Archive Network | round(x, n) | round x to n decimal places |
| select | pick columns by name |  |  |
| •filter | keep rows matching specified criteria |  |  |
| •arrange | reorder rows |  |  |
| •mutate | add new columns |  |  |
| •summarize | reduce variables to summary stats |  |  |
| •rename | change the name of a column |  |  |
| •group\_by | used with summarize to generate summary statistics from the data frame within strata defined by a variable |  |  |
| Sample dataframe | df <- data.frame(  color = c("blue", "white", "blue", "blue", "white"),  value = 1:5) |  |  |
| rbind(...) | combine arguments by rows for matrices, data frames, and others |  |  |
| cbind(...) | id. by columns |  |  |
| is.na(x), is.null(x), is.array(x), is.data.frame(x), is.numeric(x), is.complex(x), is.character(x), | ... test for type; for a complete list, use methods(is) |  |  |
| class(x) | get or set the class of x; class(x) <- "myclass" |  |  |
| dim(x) | Retrieve or set the dimension of an object; dim(x) <- c(3,2) |  |  |
| length(x) | number of elements in x |  |  |
| dimnames(x) | Retrieve or set the dimension names of an object |  |  |
| nrow(x) | number of rows; NROW(x) is the same but treats a vector as a onerow matrix |  |  |
| ncol(x) and NCOL(x) | id. for columns |  |  |
| max(x) | maximum of the elements of x |  |  |
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| var(x) or cov(x) | variance of the elements of x (calculated on n−1); if x is a matrix or a data frame, the variance-covariance matrix is calculated |  |  |
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| sd(x) | standard deviation of x cor(x) correlation |  |  |
| min(x) | minimum of the elements of x |  |  |
| range(x) | id. then c(min(x), max(x)) |  |  |
| sum(x) | sum of the elements of x |  |  |
| prod(x) | product of the elements of x |  |  |
| mean(x) | mean of the elements of x |  |  |
| median(x) | median of the elements of x |  |  |
| quantile(x,probs=) | sample quantiles corresponding to the given probabilities (defaults to 0,.25,.5,.75,1) |  |  |
| weighted.mean(x, w) | mean of x with weights w |  |  |
| rank(x) | ranks of the elements of x |  |  |
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