

# pkgInst

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based almost entirely on [this Stack Overflow response](#)

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`pkgInst` is a function that checks whether a set of packages are installed and, if not, it installs them and loads them into memory. `x` is a vector of package names.

This function is called as follows: `pkgInst(c("pkg1", "pkg2", "pkg3", ..., "pkgN"))` where `pkg1` through `pkgN` are the names of the required packages.

```
pkgInst <- function(x) {
  for (i in x) {
    ## "require" returns TRUE invisibly if it was able to load package
    if (!require(i, character.only = TRUE)) {
      ## if package was not able to be loaded, install it
      install.packages(i, dependencies = TRUE,
                      repos="http://cran.r-project.org/")
      ## load package after installing
      require (i, character.only = TRUE)
    }
  }
}
```

Example:

```
## start with a vector of package names, one of which ("qcc" in this case) was
## not previously installed.
pkgs <- c("dplyr", "qcc", "reshape2")

## run pkgInst for this vector of packages to load them into memory and to
## install any previously uninstalled packages
pkgInst(pkgs)
```

```
## Loading required package: dplyr
##
## Attaching package: 'dplyr'
##
## The following object is masked from 'package:stats':
##
##   filter
##
## The following objects are masked from 'package:base':
##
##   intersect, setdiff, setequal, union
##
## Loading required package: qcc
```

```
## Warning in library(package, lib.loc = lib.loc, character.only = TRUE,  
## logical.return = TRUE, : there is no package called 'qcc'  
  
##  
## The downloaded binary packages are in  
## /var/folders/b6/r3ss83k50r52yc4db9b95y2m0000gp/T//RtmpjWndCi/downloaded_packages  
  
## Loading required package: qcc  
## Package 'qcc', version 2.6  
## Type 'citation("qcc")' for citing this R package in publications.  
## Loading required package: reshape2
```