pkgInst

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2 March 2015 (updated 11 June 2015)

based almost entirely on this Stack Overflow response

R script | **Rmd** | **pdf** | **License**

`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.

```r
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:

```r
## start with a vector of package names, some of which have previously been
## installed and some of which (qcc in this case) have not
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//RtmplI0Z4C/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
```