Installing R for Getting and Cleaning Data (CentOS/RHEL7)

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These are my notes on installing the required R packages on CentOS/RHEL 7 for the Getting and Cleaning Data Coursera course. These work for me. YMMV.

Install R 3.2.1
Add the EPEL repository to your system:

```
yum install https://dl.fedoraproject.org/pub/epel/epel-release-latest-7.noarch.rpm
```

Install the R package

```
sudo yum -y install R
```

Baseline
The gcc toolchain (including C and C++ compilers) is needed to build many of the R packages:

```
sudo yum install gcc gcc-c++ java-1.7.0-openjdk
```

The git utilities (needed for RStudio version control). Check the References below for instructions on using Git/Rstudio:

```
sudo yum install git
```

Several TexLive packages are needed:

```
sudo yum install texlive-titling texlive-titling texlive-framed
Install other packages if you get errors about *.sty files not found.
```

Install R Packages
Install RStudio
Go to https://www.rstudio.com/products/rstudio/download/
Download the Installer package for RedHat7.
From the Linux shell prompt (replace with the file you dowloaded):

```
sudo yum localinstall rstudio-0.99.465-x86_64.rpm xml
```

XML
From the Linux shell prompt:

```
sudo yum install libxml2-devel
```

From an R session:

```
install.packages("XML")
```

xlsx
From the Linux shell prompt:

```
sudo yum install bzip2-devel lzma-devel pcre-devel
```

From an R session:

```
install.packages("rJava")
```

```
install.packages("xlsx")
```

dplyr

From an R session:

```
install.packages("dplyr")
```

data.table

From an R session:

```
install.packages("data.table")
```

jsonlite

From an R session:

```
install.packages("jsonlite")
```

swirl

From the Linux shell prompt:

```
sudo yum install curl-devel
```

From an R session:

```
install.packages("swirl")
```

rmarkdown

```
install.packages("rmarkdown")
sudo yum install texlive
wget http://chocolatshalba.ch/files/texlive/texmf-dist/tex/latex/titling/titling.sty
sudo cp titling.sty /usr/share/texmf/tex/latex/R
texhash
(http://stackoverflow.com/questions/25148055/rstudio-server-on-rhel-6-5-pandoc-error-if
luatex-sty-not-found  for more info)
```

RMySQL

From the Linux shell prompt:

```
sudo yum install mariadb-devel
```

From an R session:

```
install.packages("RMySQL")
```

References:

http://stackoverflow.com/questions/5339796/loading-an-r-package-from-a-custom-directory

http://r-pkgs.had.co.nz/git.html

https://support.rstudio.com/hc/en-us/articles/200532077-Version-Control-with-Git-and-SVN

http://www.lepem.ufc.br/jaa/r-plugin.html#r-plugin-use

http://stackoverflow.com/questions/22797964/is-inconsistency-in-rounding-between-java-7-and-java-8-a-bug

Installing Curl packages

Notes: Might apply only to RHEL6..

Requires some finagling.. Download the package from CRAN.

 R CMD INSTALL --configure-vars="LIB_DIR=/usr/lib64/pkconfig/libcurl.pc" curl_0.9.3.tar.gz