Problem Set #1 Solutions

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Problem set 1

Step 1:

- Go to your rclass folder and open your saved lecture1.2.Rmd file (hint: in lecture1 folder)

- Open the lecture1.2.Rmd file in RStudio

- At the top of the lecture1.2.Rmd file, before the "# R basics", type your first and last name (e.g. "Patricia Martin")

- Now select the "Knit" tab (icon with blue yarn ball) or scroll down and "Knit to PDF (Beamer)"

- The goal of this assignment is to make sure you are able to knit to a Beamer presentation (PDF) without running into errors.

Step 2:

Question 1: Load .Rdata directly with url
- Make sure to view current/working directory first `getwd()`
- Url to data https://github.com/ozanj/rclass/raw/master/data/recruiting/recruit_ps1_small.Rdata

- Hint: to load .Rdata use `load()` function and "url" because you are using a link

- E.g. `load(url(link))`

```r
getwd()
```

```
## [1] "/Users/patriciamartin/Desktop/GitHub/rclass/lectures/lecture1"
```

```r
?load
load(url("https://github.com/ozanj/rclass/raw/master/data/recruiting/recruit_ps1_small.Rdata"))
```

Question 2: Set your working directory and use absolute filepath to load data
- Download .Rdata using link from above

- Save .Rdata file in the recruiting folder (rclass/data/recruiting)

- View your current/working directory `getwd()`
- Use `setwd()` function to set your working directory to where .Rdata file is saved (rclass/data/recruiting)

- When setting working directory, use the absolute filepath

- Load the .Rdata file `load(name.Rdata)`
- Using the `names(data frame name)` function, report the names in this dataset (Hint: data frame name is df_recruiting)

```r
getwd()
```

```
## [1] "/Users/patriciamartin/Desktop/GitHub/rclass/lectures/lecture1"
```

```r
setwd("/Users/patriciamartin/Desktop/rclass/data/recruiting") #absolute file path to data
getwd()  #if you run lines 50-52 together you can see how the working directory changes
```

```
## [1] "/Users/patriciamartin/Desktop/rclass/data/recruiting"
```

```r
list.files() #list.files displays the files in the folder
```

```
## [1] "recruit_ps1_small.Rdata"
```

```r
load("recruit_ps1_small.Rdata")
names(df_recruiting)
```

```
## [1] "state_code"  "school_type" "ncessch"     "name"        "address"
## [6] "city"
```

Question 3: Set your working directory and use relative filepath to load data

- View your current/working directory `getwd()`
- Use `setwd()` function to set your working directory to where .Rdata file is saved (rclass/data/recruiting)

- When setting working directory, use the relative filepath

- Load the .Rdata file `load()`
- Report the names in this dataset (Hint: data frome name is df_recruiting)

```r
getwd()
```

```
## [1] "/Users/patriciamartin/Desktop/GitHub/rclass/lectures/lecture1"
```

```r
# Working directory is in the lecture1 folder, need to get to recruiting folder using relative file path
setwd("../../data/recruiting")
getwd() #View current directory after setting the directory, run lines 67-70
```

```
## [1] "/Users/patriciamartin/Desktop/GitHub/rclass/data/recruiting"
```

```r
list.files() #listing files in the recruiting folder
```

```
##  [1] "create_recruit_events.R"    "create_recruit_school.R"
##  [3] "data_hs.csv"                "events_data_.csv"
##  [5] "recruit_event_allvars.RData" "recruit_event_somevars.RData"
##  [7] "recruit_ps1_small.Rdata"    "recruit_school_allvars.RData"
##  [9] "recruit_school_somevars.RData" "text"
```

```r
# Lets load recruit_ps1_small.Rdata
load("recruit_ps1_small.Rdata")
# Use names function to view the names in the data set (data frame)
names(df_recruiting)
```

```
## [1] "state_code"  "school_type" "ncessch"     "name"        "address"
## [6] "city"
```

```r
# Run the entire code chunck
```

Question 4: Load dataset using relative filepath without first changing working directory

```r
getwd()
```

```
## [1] "/Users/patriciamartin/Desktop/GitHub/rclass/lectures/lecture1"
```

```r
load("../../data/recruiting/recruit_ps1_small.Rdata") #Set file path and load data at once
names(df_recruiting)
```

```
## [1] "state_code"  "school_type" "ncessch"     "name"        "address"
## [6] "city"
```