

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))`

```
getwd()
```

```
## [1] "/Users/lizn/rclass/lectures/lecture1"
```

```
?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`)

```
getwd()
```

```
## [1] "/Users/lizn/rclass/lectures/lecture1"
setwd("/Users/lizn/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/lizn/rclass/data/recruiting"
list.files() #list.files displays the files in the folder

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

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

## [1] "state_code" "school_type" "necessch"      "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 frame name is `df_recruiting`)

```
getwd()

## [1] "/Users/lizn/rclass/lectures/lecture1"
# 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/lizn/rclass/data/recruiting"
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] "events_data_dp.csv"          "recruit_event_allvars.RData"
## [7] "recruit_event_somevars.RData" "recruit_ps1_small.Rdata"
## [9] "recruit_school_allvars.RData" "recruit_school_somevars.RData"
## [11] "text"

# 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" "necessch"      "name"      "address"
## [6] "city"

# Run the entire code chunk
```

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

```
getwd()
```

```
## [1] "/Users/lizn/rclass/lectures/lecture1"
```

```
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"
```

Knit to pdf select the “Knit” tab (icon with blue yarn ball) or scroll down and “Knit to PDF”

- Submit both .Rmd and pdf to rclass website <https://ozanj.github.io/rclass/resources/> under week 1
- Use this naming convention “lastname_firstname_ps1”