

# Problem Set 1

insert your name here

insert date here

Welcome to Data Management and Manipulation Using R!

In this problem set, you will load data from url, or absolute/relative filepath.

- Note: Change author to your name & date to current date

## 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”
- The goal of this assignment is to make sure you are able to knit to a 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](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/karinasalazar/Dropbox/HED696C_RClass/problemsets/introduction"
```

```
?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/karinasalazar/Dropbox/HED696C_RClass/problemsets/introduction"

setwd("/Users/karinasalazar/Desktop/rclass/data/recruiting") #absolute file path to data
getwd() #if you run lines entire chunk so you can see how the working directory changes

## [1] "/Users/karinasalazar/Desktop/rclass/data/recruiting"

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

## [1] "recruit_ps1_small.Rdata"

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 frame name is `df_recruiting`)

```
getwd()

## [1] "/Users/karinasalazar/Dropbox/HED696C_RClass/problemsets/introduction"
# 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

## [1] "/Users/karinasalazar/Dropbox/HED696C_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" "ncessch" "name" "address"
## [6] "city"
```

```
# Run the entire code chunk
```

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

- View your current/working directory `getwd()`
- Load data without setting directory `load(filepath/data.Rdata)`

```
getwd()
```

```
## [1] "/Users/karinasalazar/Dropbox/HED696C_RClass/problemsets/introduction"
```

```
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
- Use this naming convention “lastname\_firstname\_ps#”