

# Problem Set 2

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libraries

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```
library(tidyverse)
```

```
## -- Attaching packages ----- tidyverse 1.3.2 --
## v ggplot2 3.4.0      v purrr   1.0.0
## v tibble  3.1.8      v dplyr  1.0.10
## v tidyr   1.2.1      v stringr 1.5.0
## v readr   2.1.3      v forcats 0.5.2
## -- Conflicts ----- tidyverse_conflicts() --
## x dplyr::filter() masks stats::filter()
## x dplyr::lag()    masks stats::lag()
```

```
library(readxl)
library(labelled)
```

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## directory paths

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```
setwd("/Users/gongpobleemingsawat/Desktop/MPP/First_Year/Winter_2023/EDUC_260B/PS2_Leemingsawat_Kongpob")  
  
data_dir <- file.path('.', 'data')  
plot_dir <- file.path('.', 'output', 'plots')  
file_dir <- file.path('.', 'output', 'files')
```

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## Part I: Command line & setting up git repo

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### Question 3:

- Command to change directories

```
pwd cd desktop ls cd my_folder
```

- Command to clone repo

```
git clone https://github.com/anyone-can-cook/PS2_Leemingsawat_Kongpob.git
```

### Question 5:

- Command to list directory contents, including hidden files/directories

```
ls -a
```

- Output

```
. .. .git .gitignore Problemset2.Rmd README.md
```

### Question 6:

- Command to create new directories

```
mkdir -p data output/files scripts cd output mkdir plots
```

- Command to create R script

```
cd scripts touch ps2_script.R
```

```
*to set path: cd desktop/MPP/First_Year/Winter_2023/EDUC_260B/PS2_Leemingsawat_Kongpob
```

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## Part II - Working with data in R

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### Question 2:

```
# Download data
download.file(url = 'https://nces.ed.gov/ipeds/datacenter/data/HD2019.zip',
             destfile = file.path(data_dir, "ps2_file.zip"))

# Unzip file
unzip(zipfile = file.path(data_dir, "ps2_file.zip"),
      exdir = data_dir)
```

### Question 3:

```
hd <- read_csv(file.path(data_dir, "hd2019.csv"),
              col_types = cols_only(UNITID = col_character(),
                                   INSTNM = col_character(),
                                   STABBR = col_character(),
                                   LONGITUD = col_double(),
                                   LATITUDE = col_double())
              ))
```

### Question 4:

```
# Filter
hd_ca <- hd %>% filter(hd$STABBR == "CA")

# Plot
png(file.path(plot_dir, 'ca_univs.png'))
ggplot(hd_ca, aes(x = LATITUDE, y = LONGITUD)) +
  geom_point() +
  theme_minimal() +
  coord_fixed(ratio = 1.5)
dev.off()
```

```
## pdf
## 2
```

## Question 5:

```
write_csv(hd_ca, file = file.path(file_dir, "hd2019_ca.csv"))
```

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## Part III - Git & GitHub

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## Question 1:

Answer: git status

Output: 'Untracked files' . . # Question 2:

answer: git add

output: change to be committed . . # Question 3:

answer: git commit -m data output scripts

## Question 4:

...

## Question 5:

1. What heading is '.gitignore' listed under?

Changes not staged for commit

2. Command to show changes made to '.gitignore'

git diff -- .gitignore

3. Output

```
diff --git a/.gitignore b/.gitignore
```

```
index fae8299..6154f65 100644 --- a/.gitignore +++ b/.gitignore @@ -1,3 +1,7 @@ +#Problem set files +problemset2.md +/.DS_Store . . . # Question 6:
```

```
git add .gitignore PS2_Leemingsawat_Kongpob . . . # Question 7:
```

1. command

git log . . . # Question 8:

1. command

git remote -v

2. output

origin https://github.com/anyone-can-cook/PS2\_Leemingsawat\_Kongpob/ (fetch) origin https://github.com/anyone-can-cook/PS2\_Leemingsawat\_Kongpob/ (push) . . . # Question 9:

git push

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## Part III - GitHub Issue

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1. Paste the url to your issue here: [https://github.com/anyone-can-cook/rclass2\\_student\\_issues\\_w23/issues/96#issue-1558853048](https://github.com/anyone-can-cook/rclass2_student_issues_w23/issues/96#issue-1558853048)
2. Paste the url to the issue you responded to here: [https://github.com/anyone-can-cook/rclass2\\_student\\_issues\\_w23/issues/84#issuecomment-1405736210](https://github.com/anyone-can-cook/rclass2_student_issues_w23/issues/84#issuecomment-1405736210)

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**END SCRIPT**

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