Homework 1

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Problem 2

Part A

My objectives are

- Concepts and basic mechanism of Git
- Making fancy reports
- Making friends

Part B

$$f(x|\beta) = \frac{1}{\beta}e^{-\frac{x}{\beta}} \tag{1}$$

$$f(x|\alpha,\beta) = \frac{\beta\alpha^{\beta}}{x^{\beta+1}} \tag{2}$$

$$f(x|a,b) = \frac{1}{b-a} \tag{3}$$

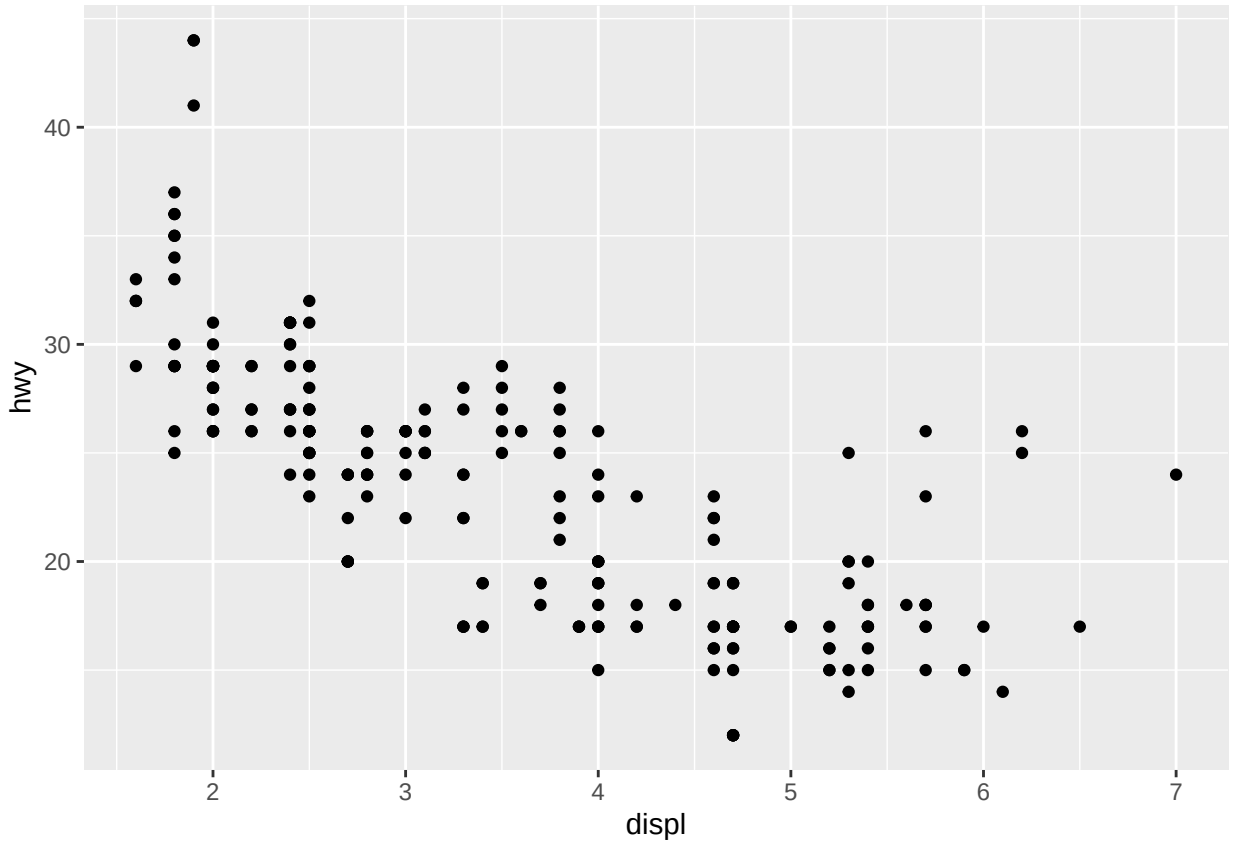
Problem 3

To the document created in Problem 2, add a summary of the steps in performing Reproducible Research in numbered list format.
Next to each item, comment on any challenges you see in performing the step.

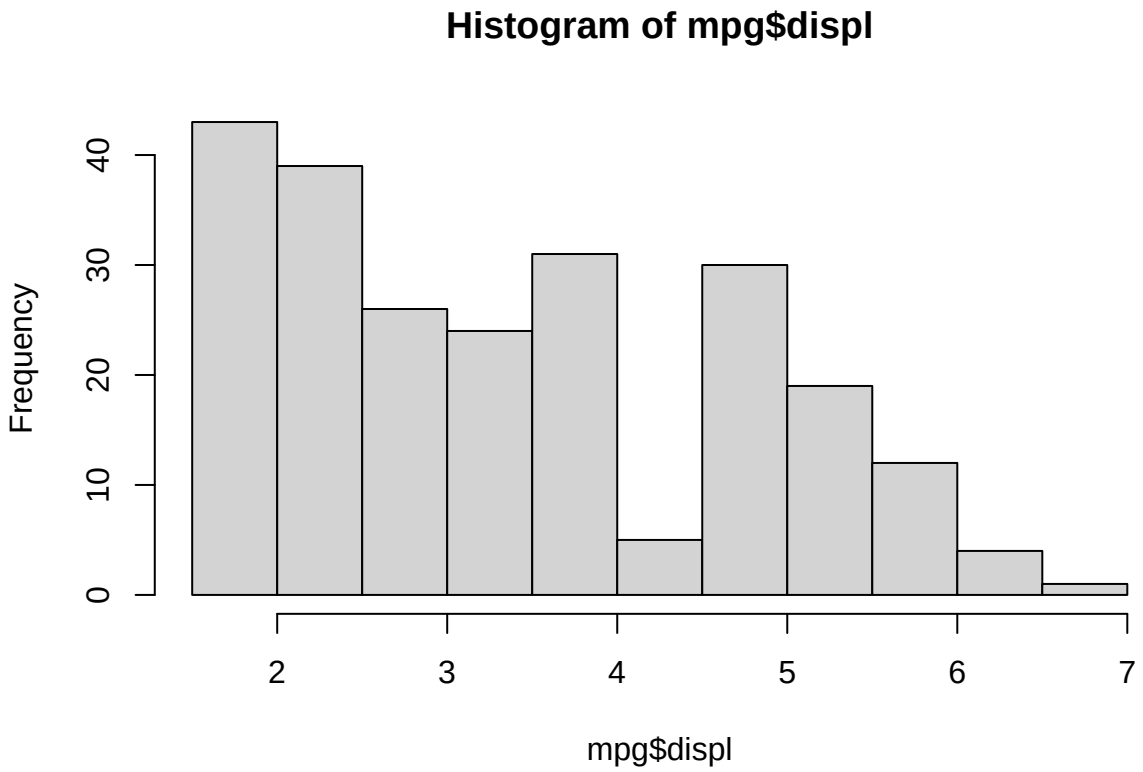
1. Keeping record of elements that lead to the current result and ensuring them to be automated.
    - Challenge: Sometimes manual data manipulation is unavoidable.
2. Saving raw data including random seeds.
    - Challenge: Raw data may change with time.
3. Making analysis process easy to understand and public.
    - Challenge: Different people may have different opinions on analysing methods.

Problem 4

```r
#install.packages("ggplot2")
library(ggplot2)
ggplot(data=mpg) +
  geom_point(mapping=aes(x=displ,y=hwy))
```




```r
hist(mpg$displ)
```



Problem 5

Please knit this document to PDF (name should be `HW2_pid`) and push to GitHub:
In the R Terminal, type:

1. git pull
2. git add HW1_pid.[pR]* (NOTE: this should add two files)
3. git commit -m "final HW1 submission"
4. git push

A more detailed description is on the course website under *Submitting Homework*.

Reminder on where to find Git help:

Read through the Git help Chapters 1 and 2. https://git-scm.com/book/en/v2