Problem set 1

Put your name here

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```
library(tidyverse)
```

```
-- Attaching core tidyverse packages ------------------------ tidyverse 2.0.0 --
v dplyr     1.1.4     v readr     2.1.5
v forcats   1.0.0     v stringr   1.5.1
v ggplot2   3.5.1     v tibble    3.2.1
v lubridate 1.9.3     v tidyr     1.3.1
v purrr     1.0.2
-- Conflicts ------------------------------------------ tidyverse_conflicts() --
x dplyr::filter() masks stats::filter()
x dplyr::lag()    masks stats::lag()
i Use the conflicted package (<http://conflicted.r-lib.org/>) to force all conflicts to beco
```

Learning R

Read the data

> Read the `cars.csv` data into R. Make sure to use the correct path ("data/cars.csv"). Name the data frame "cars" when reading it in. You don't need to understand what all the variables mean.

```
cars <- read_csv("../data/cars.csv")
```

```
Rows: 234 Columns: 11
-- Column specification --------------------------------------------------------
Delimiter: ","
chr (6): manufacturer, model, trans, drv, fl, class
dbl (5): displ, year, cyl, cty, hwy

i Use `spec()` to retrieve the full column specification for this data.
i Specify the column types or set `show_col_types = FALSE` to quiet this message.
```

What's the class of the `model` and the `year` variable?

```
class(cars$model)
```

```
[1] "character"
```

```
class(cars$year)
```

```
[1] "numeric"
```

> Subset the cars data by selecting only rows that correspond to the manufacturer "honda" and that shows only the columns for models and the year. Name that subset "honda_data" and print it.

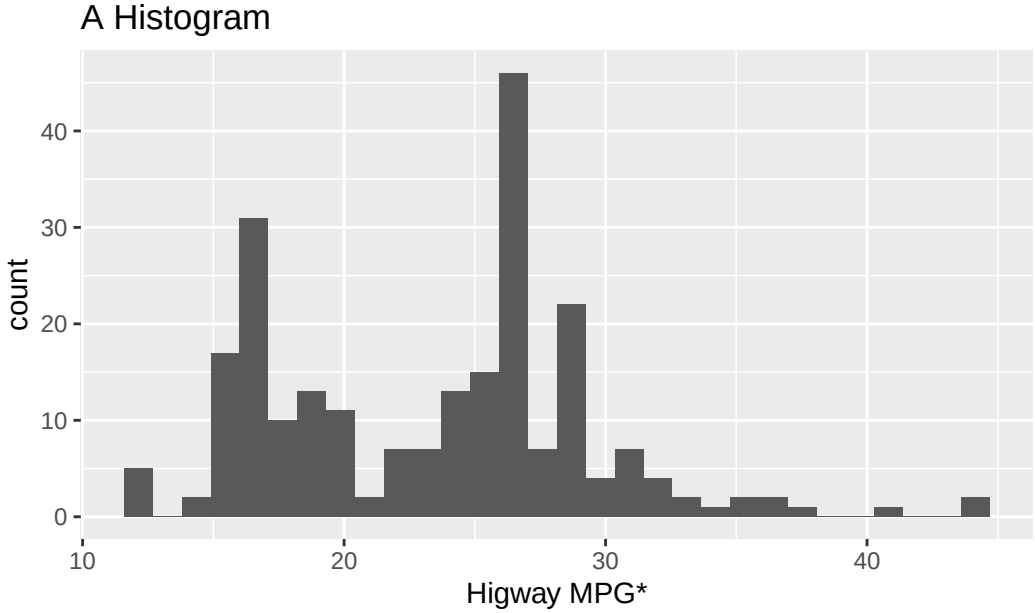
```
honda_data <- cars[cars$manufacturer == "honda", c("model", "year")]

# alternative
honda_data <- cars %>%
  filter(manufacturer == "honda") %>%
  select(model, year)
```

My first plots

> You haven't learned about plots yet. But to give you a taste for what's coming, execute the code chunk below and let the magic happen. Make sure your data frame is named "cars" for this to work

A plot on the distance that cars can travel per gallon. Note that we will hide the code when rendering by setting `echo: false`.

```
`stat_bin()` using `bins = 30`. Pick better value with `binwidth`.
```



*miles per gallon, is the distance, measured in miles, that a car can travel per gallon of fuel.