## Lab 2

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```
library(tidyverse)
## -- Attaching packages ------ tidyverse 1.3.0 --
## v ggplot2 3.2.1
                   v purrr
                            0.3.3
## v tibble 2.1.3
                   v dplyr
                            0.8.3
## v tidyr 1.0.0 v stringr 1.4.0
## v readr
          1.3.1
                   v forcats 0.4.0
## -- Conflicts -----
                                  ----- tidyverse_conflicts() --
## x dplyr::filter() masks stats::filter()
## x dplyr::lag()
                  masks stats::lag()
choco <- read.csv("https://xdaiisu.github.io/ds202materials/hwlabs/choco.csv")</pre>
```

## 1. What is the overall number of chocolate bars rated?

Amount of duplicated rows.

```
nrow(choco[! duplicated(choco), ]) - nrow(choco)

## [1] 0
length(choco$Rating)

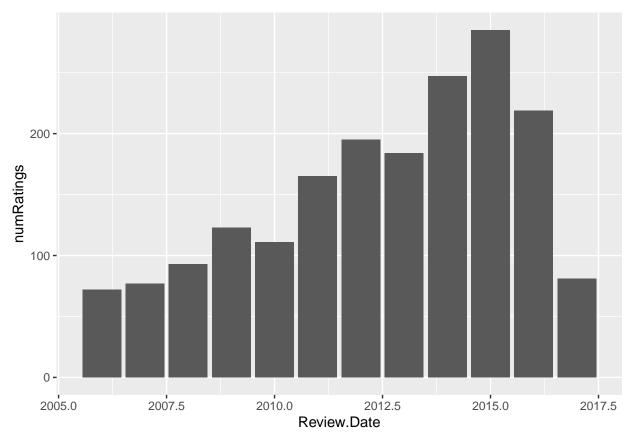
## [1] 1852
```

Because there are no duplicates, we can conclude there are 1852 rated bars.

## 2. How does the number of ratings depend on the year? Draw a bar chart of the number of reports.

```
choco %>%
  group_by(Review.Date) %>%
  summarize(numRatings = n()) -> choco_ratings

choco_ratings %>%
  ggplot(aes(x = Review.Date, y = numRatings)) +
  geom_bar(stat = "identity")
```



The number of ratings gradually increases with a peak in 2015 and then a decrease in 2016 and 2017.

## 3. Which are the three locations with the most ratings? How do ratings compare across these company locations?

```
AggRatings <- choco %>%
  group_by(Company.Location) %>%
    summarize(AggRatings.Location = n()) %>%
      arrange(desc(AggRatings.Location))
MostPopular <- head(AggRatings, 3)</pre>
print(MostPopular)
## # A tibble: 3 x 2
##
     Company.Location AggRatings.Location
##
     <fct>
                                     <int>
## 1 U.S.A.
                                       787
## 2 France
                                       158
## 3 Canada
                                       132
choco %>%
  filter(Company.Location == 'U.S.A.') %>%
    pull(Rating) %>%
      summary()
##
      Min. 1st Qu. Median
                               Mean 3rd Qu.
                                                Max.
```