# Lab 9 - Plot the Monthly Closing Stock Prices and the Mean Values

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10/24/2023

In this lab, we are going to visualize the monthly fluctuation in stock prices.

#### Libraries

Load the necessary libraries.

```
library(tidyverse)
## -- Attaching core tidyverse packages ----- tidyverse 2.0.0 --
## v dplyr
             1.1.3
                        v readr
                                   2.1.4
## v forcats
             1.0.0
                        v stringr
                                   1.5.0
## v ggplot2 3.4.3
                        v tibble
                                   3.2.1
## v lubridate 1.9.3
                        v tidyr
                                   1.3.0
              1.0.2
## v purrr
## -- Conflicts ----- tidyverse conflicts() --
## x dplyr::filter() masks stats::filter()
## x dplyr::lag() masks stats::lag()
## i Use the conflicted package (<a href="http://conflicted.r-lib.org/">http://conflicted.r-lib.org/</a>) to force all conflicts to become error
```

### Data

Use the data from the Facebook dataset.

```
df_fb <- read_csv("../data/FB.csv")

## Rows: 357 Columns: 7

## -- Column specification ------

## Delimiter: ","

## dbl (6): Open, High, Low, Close, Adj Close, Volume

## date (1): Date

##

## 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.

df_fb$Date <- as.Date(df_fb$Date)

df_fb$Month <- strftime(df_fb$Date, "%m")

df_fb$Month <- as.numeric(df_fb$Month)

df_fb <- df_fb %>% filter ((Date >= "2017-05-01") & (Date < "2018-05-01"))</pre>
```

#### Plot

Complete the cell with the code to make the plot.