PSTAT 174/274: Homework # 1. (week 1 & 2)

NOTE: all cheat sheets referred to are provided in pdf format for you.

1. (both 174 & 274 attempt)
Objective for the first week is to setup the following software:

- R software: R version 4.2.2 (Innocent and Trusting) has been released on 2022-10-31. `https://www.r-project.org/`

- Install R studio IDE: `https://posit.co/download/rstudio-desktop/`

- Advised: set up github account `https://github.com/`

- Advised: set up github desktop `https://desktop.github.com/`

- Advised: install git

- Connect R studio to Github `https://happygitwithr.com/rstudio-git-github.html`

2. (both 174 & 274 attempt)
Review the RStudio Cheat sheet. Follow the R markdown tutorial (follow guide): `https://rmarkdown.rstudio.com/lesson-1.html`

3. (both 174 & 274 attempt)
Now its your turn to create your first markdown in R:

- Guide: look at the Rmarkdown cheat sheet

- read in the data provided in TVC_DXY, 1M.csv which contains time (ISO format), Open, High, Low, Close

- convert the time to format yyyy-mm-dd T hh:mm:ss format

- create a ts object and tibble (explore data structures

- plot the time series using various time series plotting techniques from notes.

- comment on the outcomes each time in the markdown file.

Note: there is a similar example provided in the R code example.

4. (both 174 & 274 attempt)
Review and trial aspects of the following R studio cheat sheets: `https://support--rstudio-com.netlify.app/resources/cheatsheets/`
or `https://posit.co/resources/cheatsheets/`

- ReadR cheat sheet

- tidyR cheat sheet

- dplyR cheat sheet

- ggplot2 cheat sheet

- lubridate cheat sheet

- stringer cheat sheet

- Advanced: shiny cheat sheet

- Advanced: plumber cheat sheet

- Advanced: Devtools cheat sheet