Exercise 02

#library(knitr)  
#library(ggplot2)  
#opts\_chunk$set(fig.align = "center", fig.height = 4, fig.width = 5.5)

For this homework, you will save the R Markdown (e.g., .Rmd) homework document and save it to your homework project directory on your computer. Save a new copy of this .Rmd file so that the file name has the prefix 2023\_Lastname\_FirstInitial. Example: 2023\_cookg\_EX\_02.Rmd. Feel free to work with a partner but understand that the work submitted has to be your own.

*Enter your name here*

**This homework is due on Tuesday by 2:30pm. Please knit as a pdf file and upload** [**here**](https://claremontmckenna.app.box.com/f/140969a32dea44e9ab6c0c00146d66e3)**.**

snippet upload\_assign\_167 <https://claremontmckenna.app.box.com/f/140969a32dea44e9ab6c0c00146d66e3>

**Problem 1: Check your working directory**

You should have the {here} library installed. The following code block contains a function from the {here} library that will return the name of the your working directory. If the function does not run, you will need to install {here}. In addition, if the working directory is not put in a place where your homework goes, you will need to either move your .Rmd homework file or set up a project directory for homework.

here::here()

## [1] "C:/Users/gcook/Sync/git/dataviz23"

**Problem 2: (X pts): Loading Libraries**

Inside the following code block, load the {readr} and {dplyr} libraries.

**Problem x: (x pts): Create objects**

Create a code chunk in R Markdown by either a) typing on a Windows system CONTROL+ALT+i or on a Mac COMMAND+OPTION+i all at the same time or by 2) clicking the green icon containing a + and a c that appears in RStudio near the file tab for your opened .Rmd file. You can also [go here](https://rmarkdown.rstudio.com/lesson-3.html) to see the icon image.

In that code chunk:

1. assign the character string “hello” to an object named x,
2. assign any numeric object to y, and
3. assign 21 to z.

x <- "hello"  
  
y <- 2  
  
z <- c(1,2)

**Examine your working directory**

The {here} library makes project management easy. By default executing here::here() will return the path to the working directory of the project.

Edit the following code so that your .Rmd file knits as both html and a pdf documents. Keep in mind that you will need to change the file name and You can type ?rmarkdown::render into your R console if you want to examine function arguments.

Insert a code block below.

**Problem x: (x pts)**

Practice using some RMarkdown code by creating: **a)** bulleted list with three items, **b)** a numbered list with three items, and **c)** a sentence that has one word in bold and one word in italics.

**Problem x: (x pts)**

**Problem x: (x pts)**

Demonstrate basic command of Markdown by creating a bulleted list with three items, a numbered list with three items, and a sentence that has one word in bold and one word in italics. You can find some tips [here](https://rmarkdown.rstudio.com/lesson-8.html).

*Your text goes here.*

**Problem 2: (3 pts)** The economics dataset contains various time series data from the US economy:

Use ggplot to make a line plot of the total population (pop, in thousands) versus time (column date).

# your code goes here

**Problem 2: (3 pts): Output Formats**

[here](https://rmarkdown.rstudio.com/lesson-9.html)

**Problem 3: (3 pts)** Again using the economics dataset, now make a scatter plot (using geom\_point()) of the number of unemployed versus the total population (pop), and color points by date.

# your code goes here