Homework 1

This homework is due on Jan. 23, 2025 at 11:00pm. Please submit as a pdf file on Canvas.

Problem 1: (8 pts) Demonstrate basic command of Quarto document editing 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.

Your text goes here.

Problem 2: (6 pts) The `economics` dataset contains various time series data from the US economy:

```
economics
```

```
# A tibble: 574 × 6
   date          pce     pop psavert uempmed unemploy
   <date>       <dbl>  <dbl>   <dbl>   <dbl>    <dbl>
 1 1967-07-01  507. 198712    12.6     4.5     2944
 2 1967-08-01  510. 198911    12.6     4.7     2945
 3 1967-09-01  516. 199113    11.9     4.6     2958
 4 1967-10-01  512. 199311    12.9     4.9     3143
 5 1967-11-01  517. 199498    12.8     4.7     3066
 6 1967-12-01  525. 199657    11.8     4.8     3018
 7 1968-01-01  531. 199808    11.7     5.1     2878
 8 1968-02-01  534. 199920    12.3     4.5     3001
 9 1968-03-01  544. 200056    11.7     4.1     2877
10 1968-04-01  544  200208    12.3     4.6     2709
# i 564 more rows
```

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

```
# your code goes here
```

Problem 3: (6 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
```