Homework 1

Enter your name and EID here

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This homework is due on Jan. 24, 2022 at 11:00am. Please submit as a pdf file on Canvas.

Problem 1: (4 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.

Bulleted List

- Robert De Niro
- Jean Reno
- Stellan Skarsgaard

Numbered List

1. Robert De Niro
2. Jean Reno
3. Stellan Skarsgaard

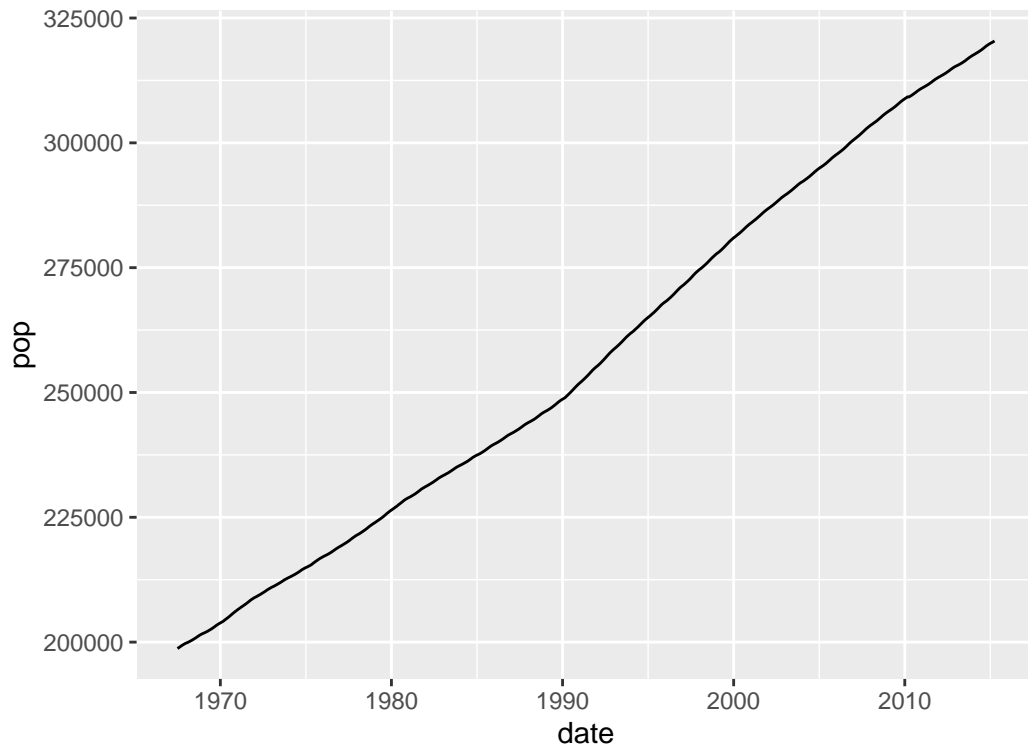Sean Bean is usually typecast as *the character who* **dies**.

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

```
head(economics)
```

```
## # A tibble: 6 x 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
```

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

```
ggplot(economics, aes(date, pop)) +
  geom_line()
```

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.

```
ggplot(economics, aes(pop, uempmed, color = date)) +
  geom_point()
```