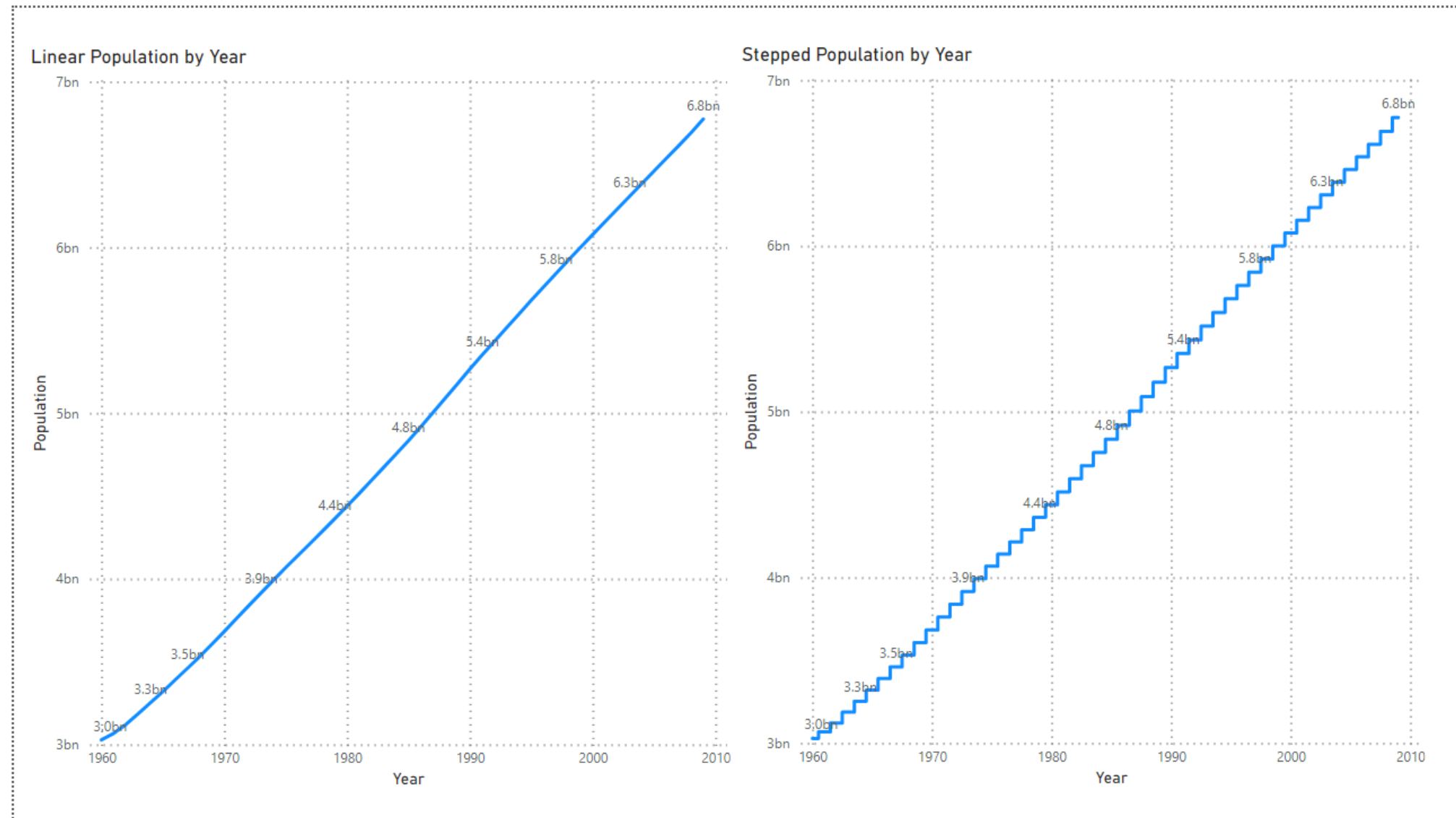


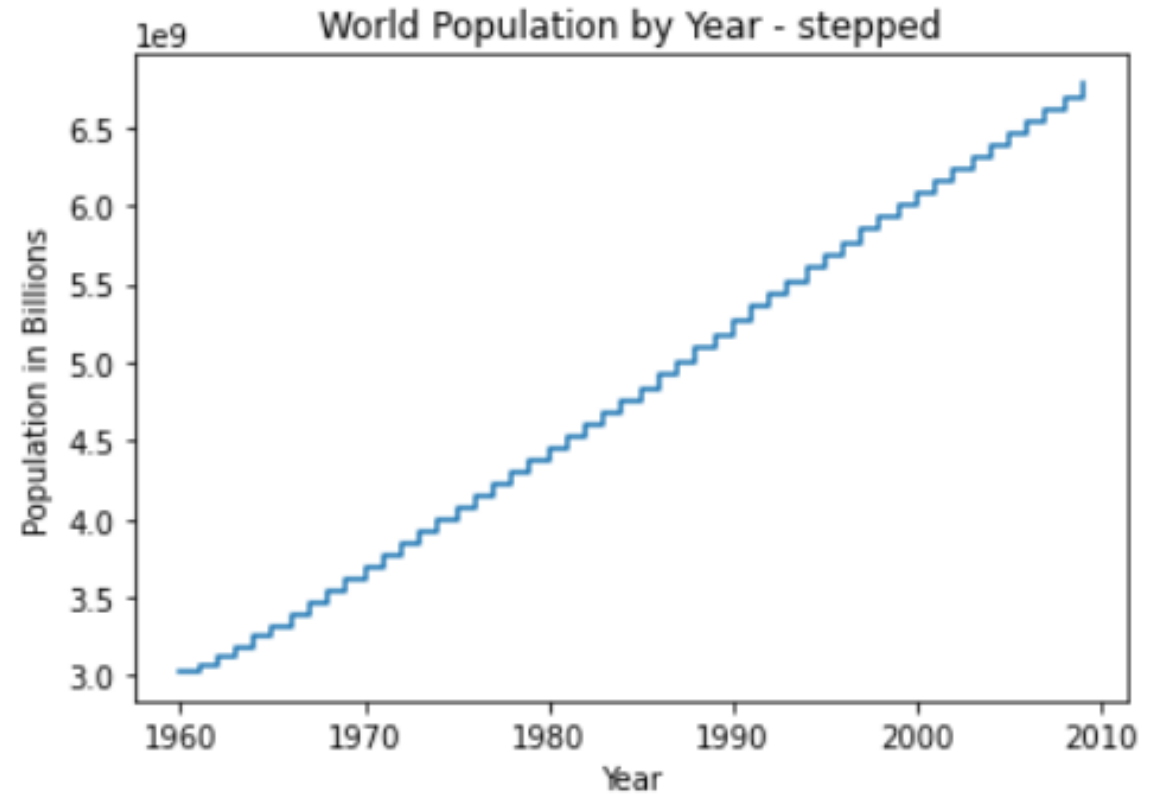
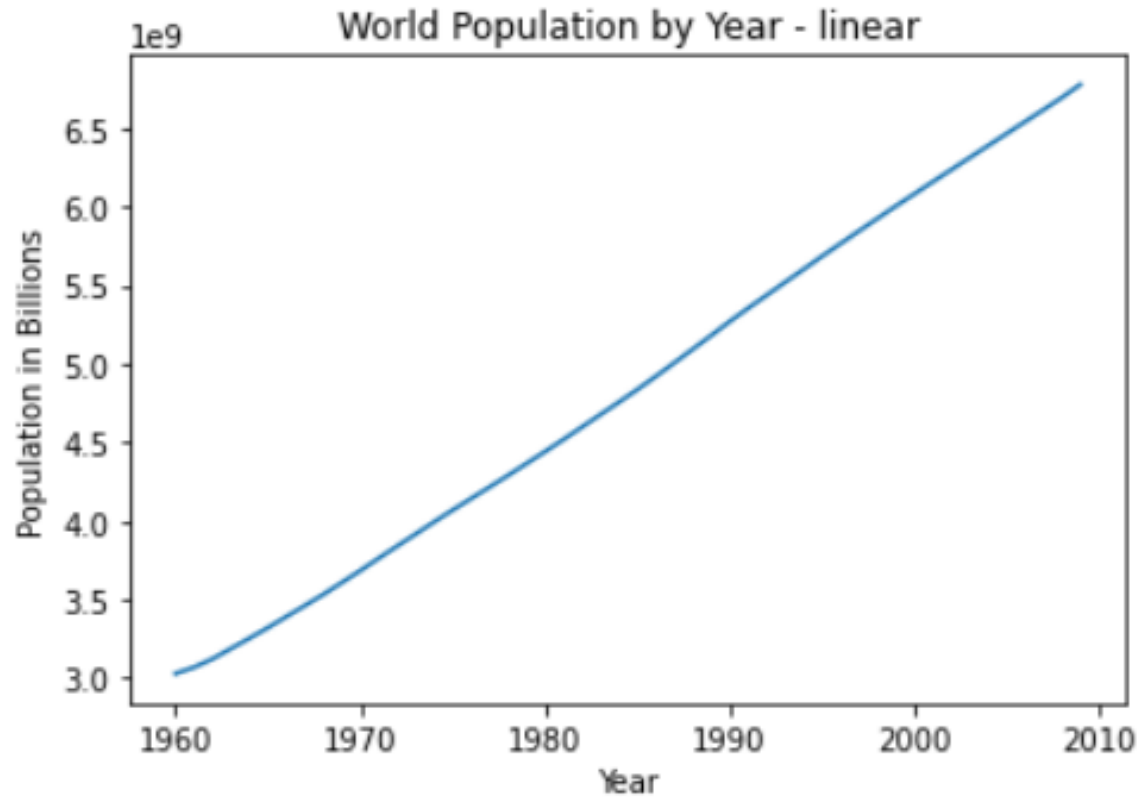
DSC 640 – Week 3 & 4

Michael Ersevim

Power BI: Line and Stepped graphs of world population



Python: Line and Stepped graphs of world population



Python: Line and Stepped graphs of world population - CODE

DSCC640 - Michael Ersevrim - Week 3&4 assignment

```
In [1]: # Call in libraries
import matplotlib.pyplot as plt
import numpy as np
import pandas as pd
```

```
In [2]: # create dataframe from excel file downloaded
df = pd.read_excel('C:\\Users\\Kate\\Documents\\Bellevue DS classes\\DSC640\\world-population.xlsm')
df.head()
```

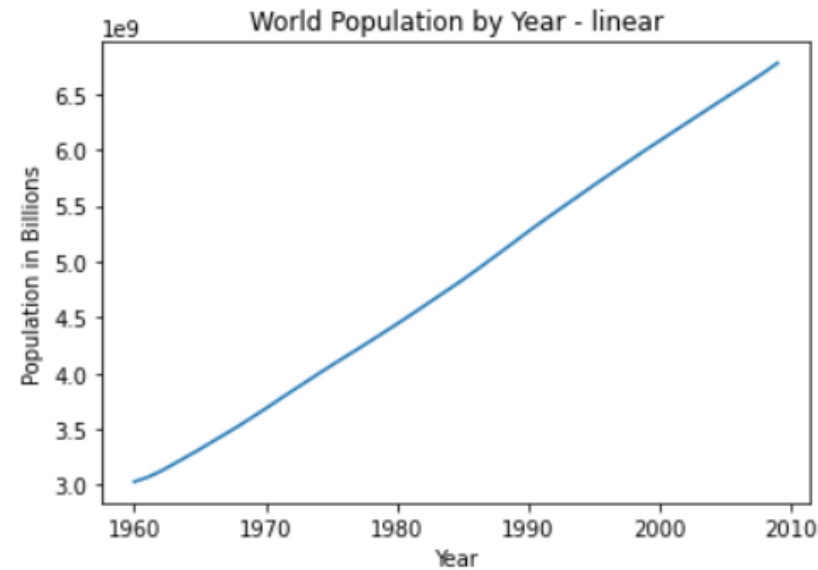
Out[2]:

	Year	Population
0	1960	3028654024
1	1961	3068356747
2	1962	3121963107
3	1963	3187471383
4	1964	3253112403

```
In [3]: # Define cols to graph
year = df["Year"]
pop = df["Population"]
```

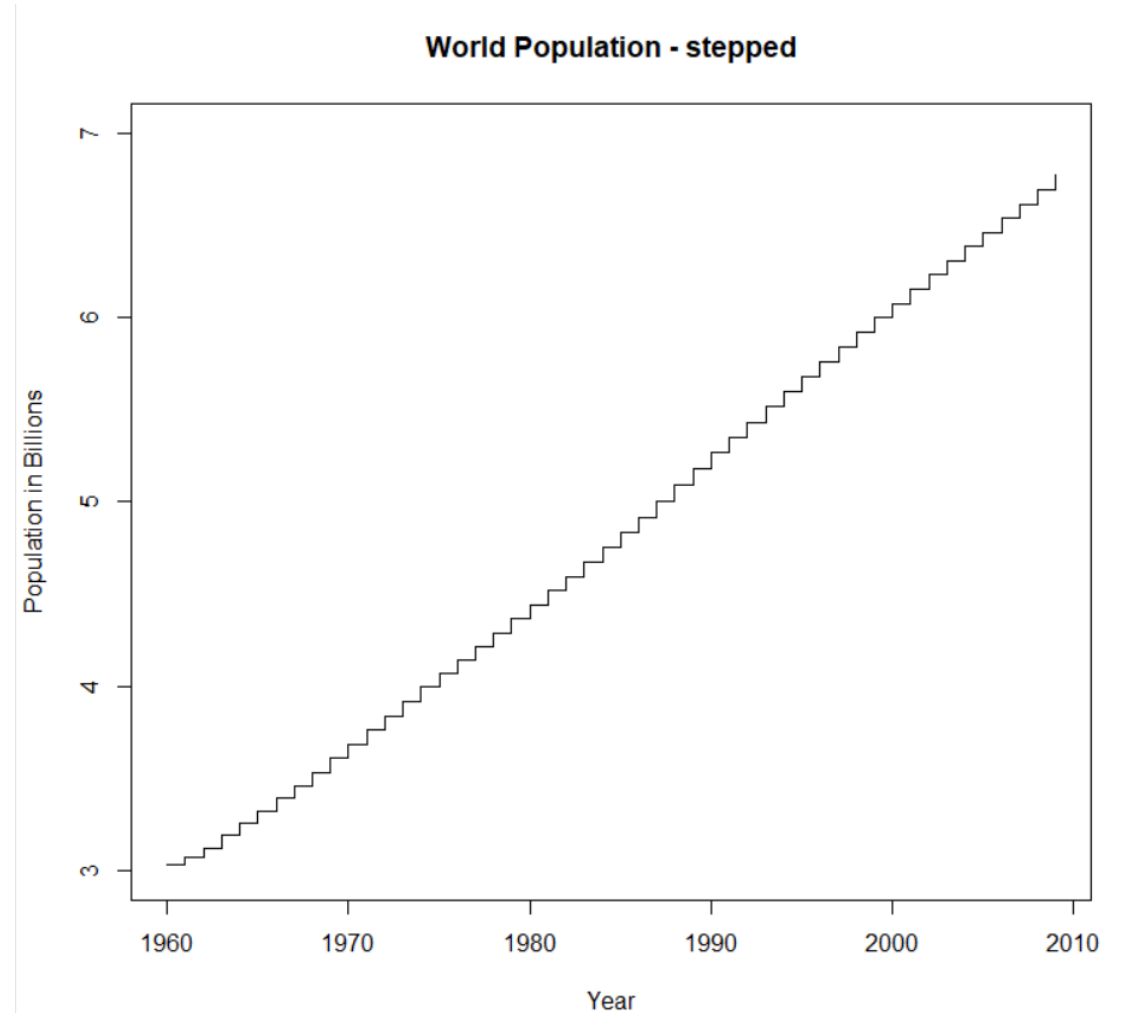
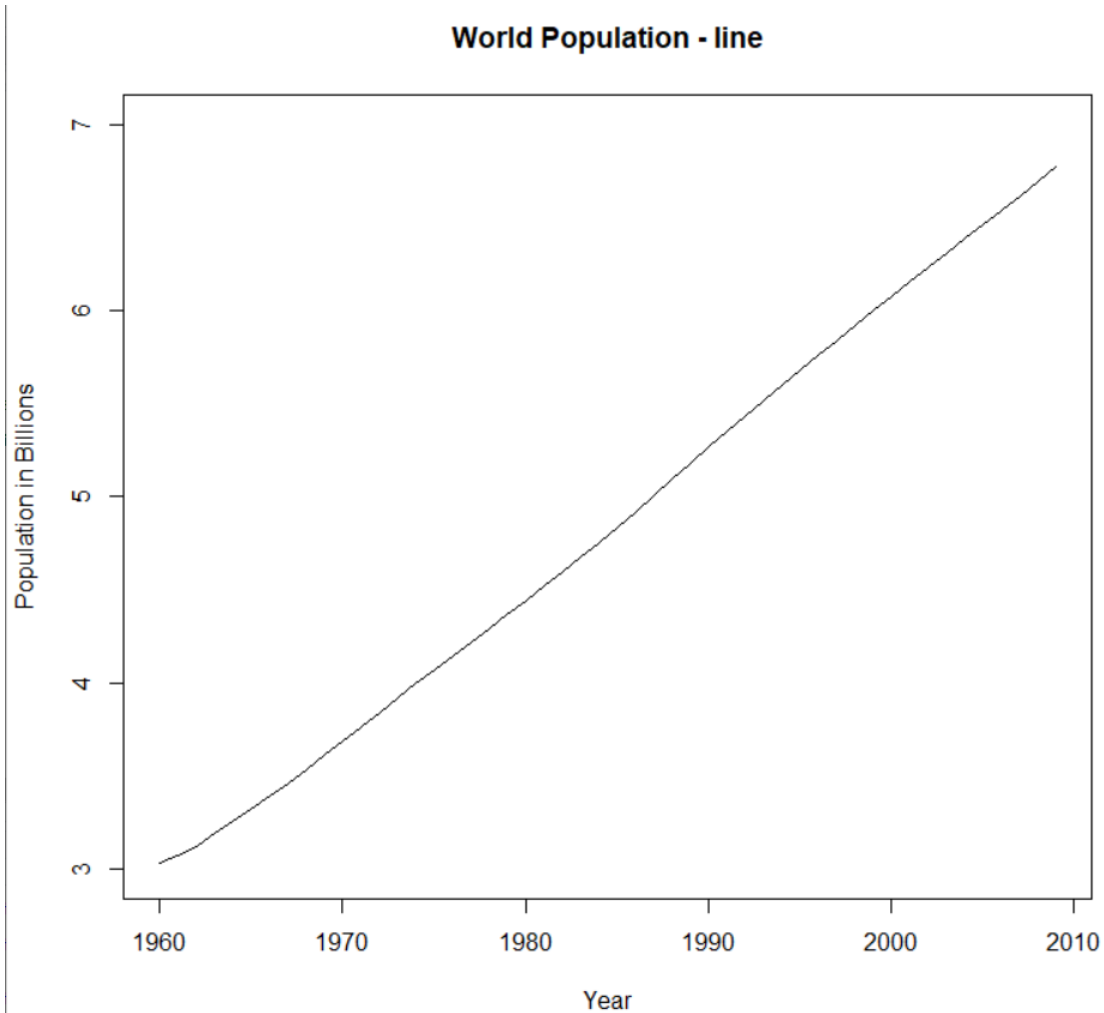
Python: Line and Stepped graphs of world population - CODE

```
In [8]: # make the line graph
plt.plot(year,pop)
plt.title("World Population by Year - linear")
plt.xlabel("Year")
plt.ylabel("Population in Billions")
plt.show()
```



```
In [9]: # make the step graph
plt.step(year,pop, where='post')
plt.title("World Population by Year - stepped")
plt.xlabel("Year")
plt.ylabel("Population in Billions")
plt.show()
```

R: Line and Stepped graphs of world population



R: Line and Stepped graphs of world population - CODE

```
1 'Michael Ersevimi - DSC640'
2 'week 3&4 graphs assignment'
3
4 # Set wd to find and store files
5 setwd("C:/Users/Kate/Documents/Bellevue DS classes/DSC640")
6
7 # calling libraries
8 library(ggplot2)
9 library(readxl)
10 library(lessR)
11
12 # Read in data
13 data <- read_excel("world-population.xlsx")
14 pop <- data$Population/1000000000
15 print(data) #Test it worked right
16
17 # Horizontal bar plot, then vertical
18 plot(data$Year, pop, type='l', main='world Population - line', xlab='Year',
19       ylab='Population in Billions', ylim = c(3, 7))
20
21 plot(data$Year, pop, type='s', main='world Population - stepped', xlab='Year',
22       ylab='Population in Billions', ylim = c(3, 7))
23
24
```