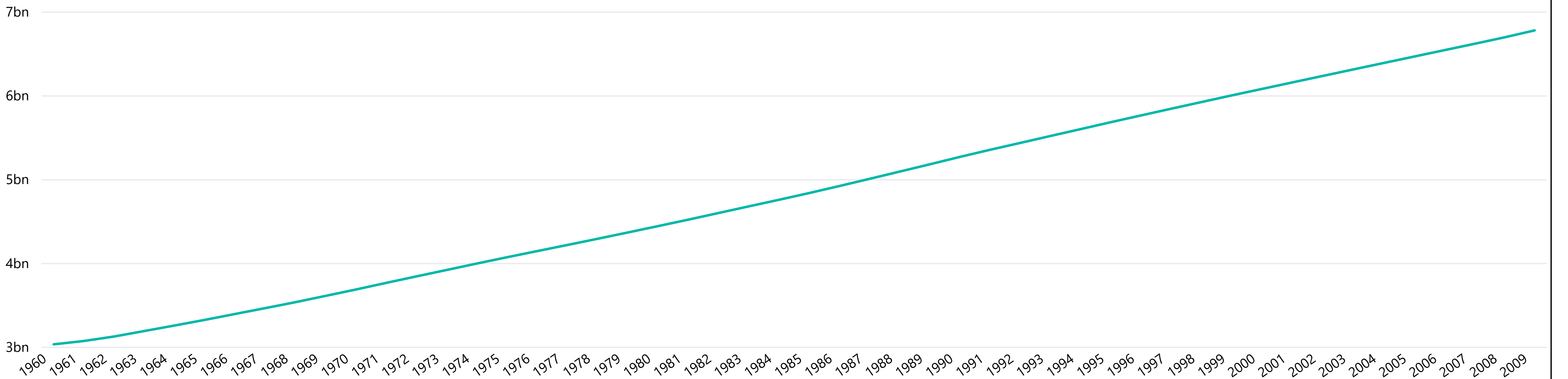## PowerBI - World Population Growth - Line Chart

PowerBI - World Population Growth - Step Chart

PowerBI - American Electric Power (MW) by Year - Line Chart

Power BI - American Electric Power (MW) by Year - Step Chart
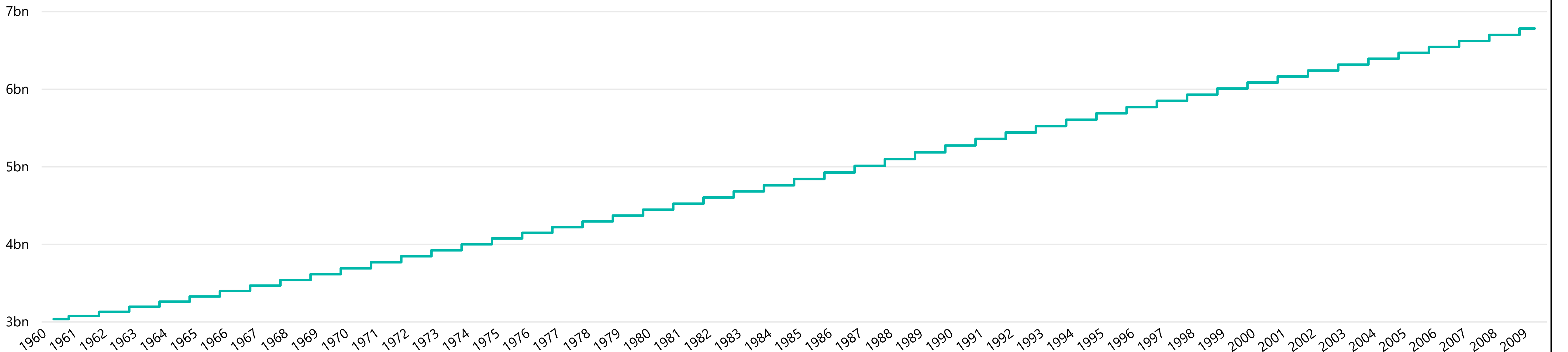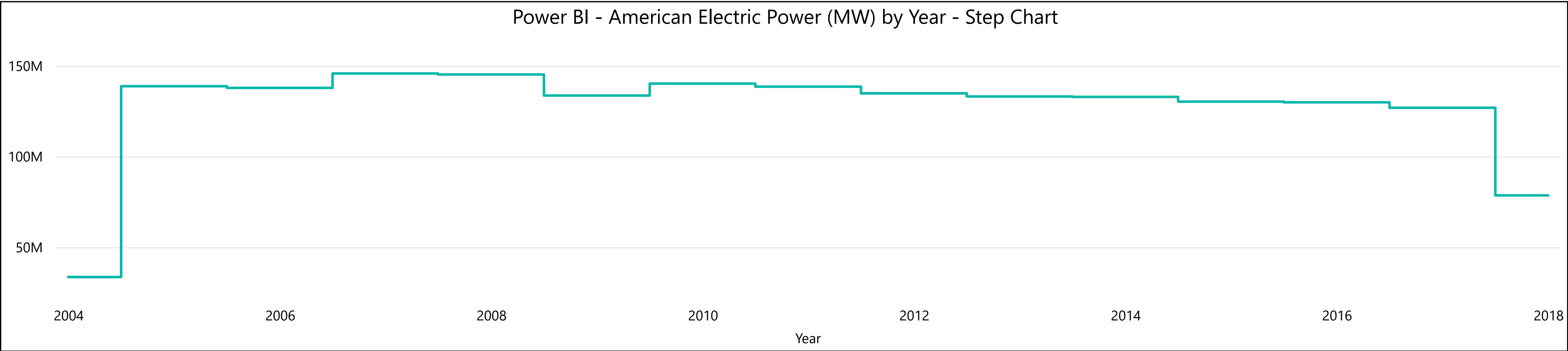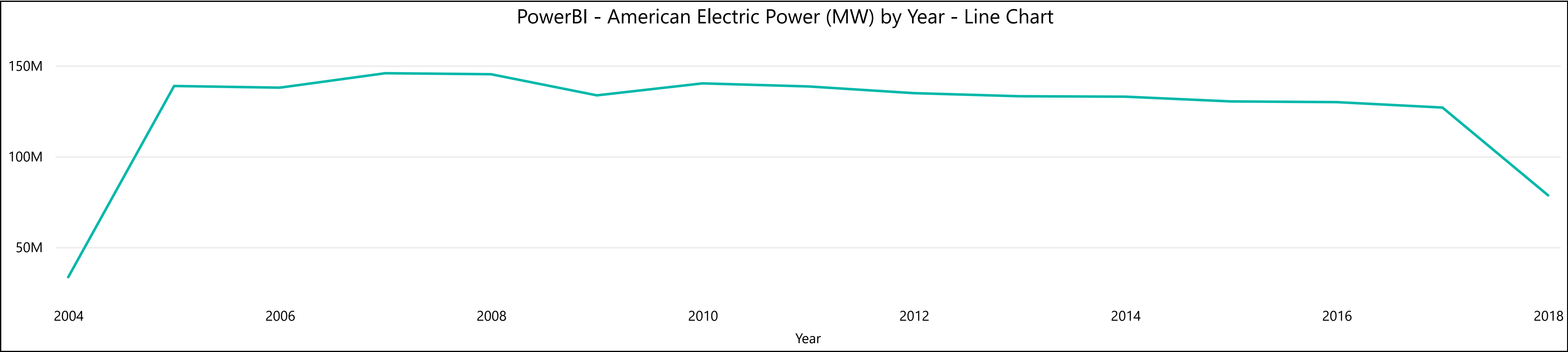
Author: Anjani Bonda

Assignment: Week3_4 - 2.2 Visualization Tools

Date: Jan 06 2023

```
In [1]:  # Import libraries
         import csv
         #import xlrd
         import pandas as pd
         import matplotlib.pyplot as plt
         from datetime import datetime as dt
```

```
In [2]:  # Read world population data
         fileData1 = 'ex2-2/world-population.xlsm'
         population = pd.read_excel(fileData1)
         print(population.head())
```

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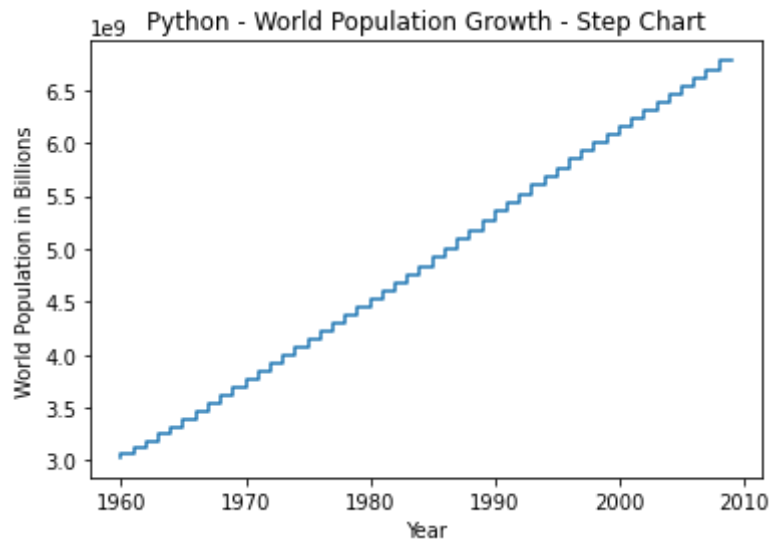
World Population data

Line and Step Charts

```
In [9]:  X = population['Year']
         Y = population['Population']
         plt.title('Python - World Population Growth - Line Chart')
         plt.plot(X, Y)
         plt.xlabel("Year")
         plt.ylabel("World Population in Billions")
         plt.show()
```
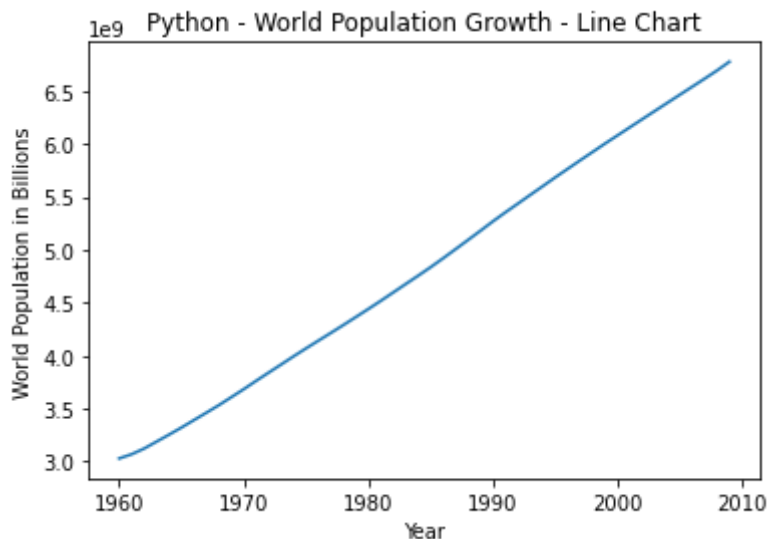
In [10]:
```python
plt.title('Python - World Population Growth - Step Chart')
plt.step(X, Y)
plt.xlabel("Year")
plt.ylabel("World Population in Billions")
plt.show()
```
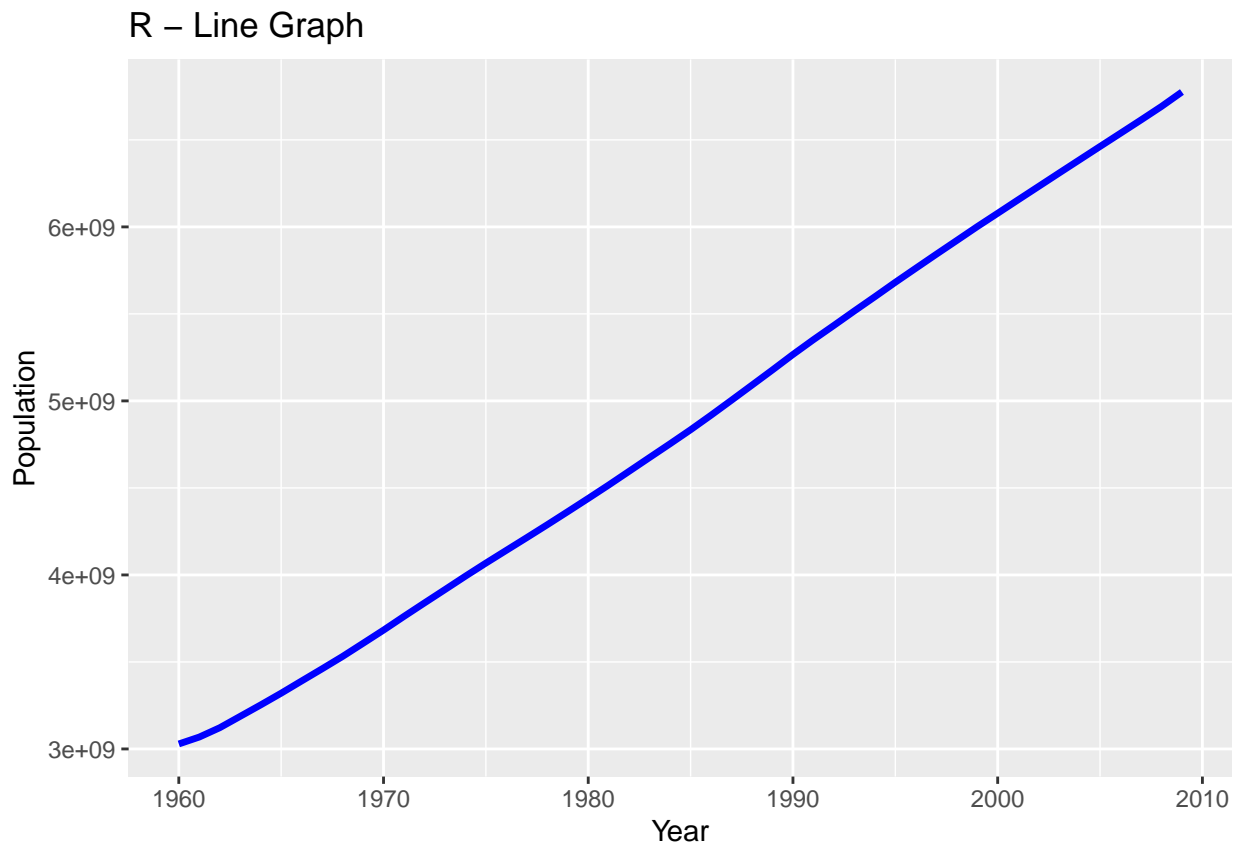

In [ ]:

Assignment 2.2

Anjani Bonda

01/06/2023

These two weeks we are going to be focused on line charts and step charts using various tools to create these visualizations. You must consolidate all the charts into ONE document with each chart labeled with the type of chart and technology - for example: Python - Bar Chart.

```
##   Year Population
## 1 1960 3028654024
## 2 1961 3068356747
## 3 1962 3121963107
## 4 1963 3187471383
## 5 1964 3253112403
## 6 1965 3320396924
```

Line Graph

Step Graph

R– Step Graph