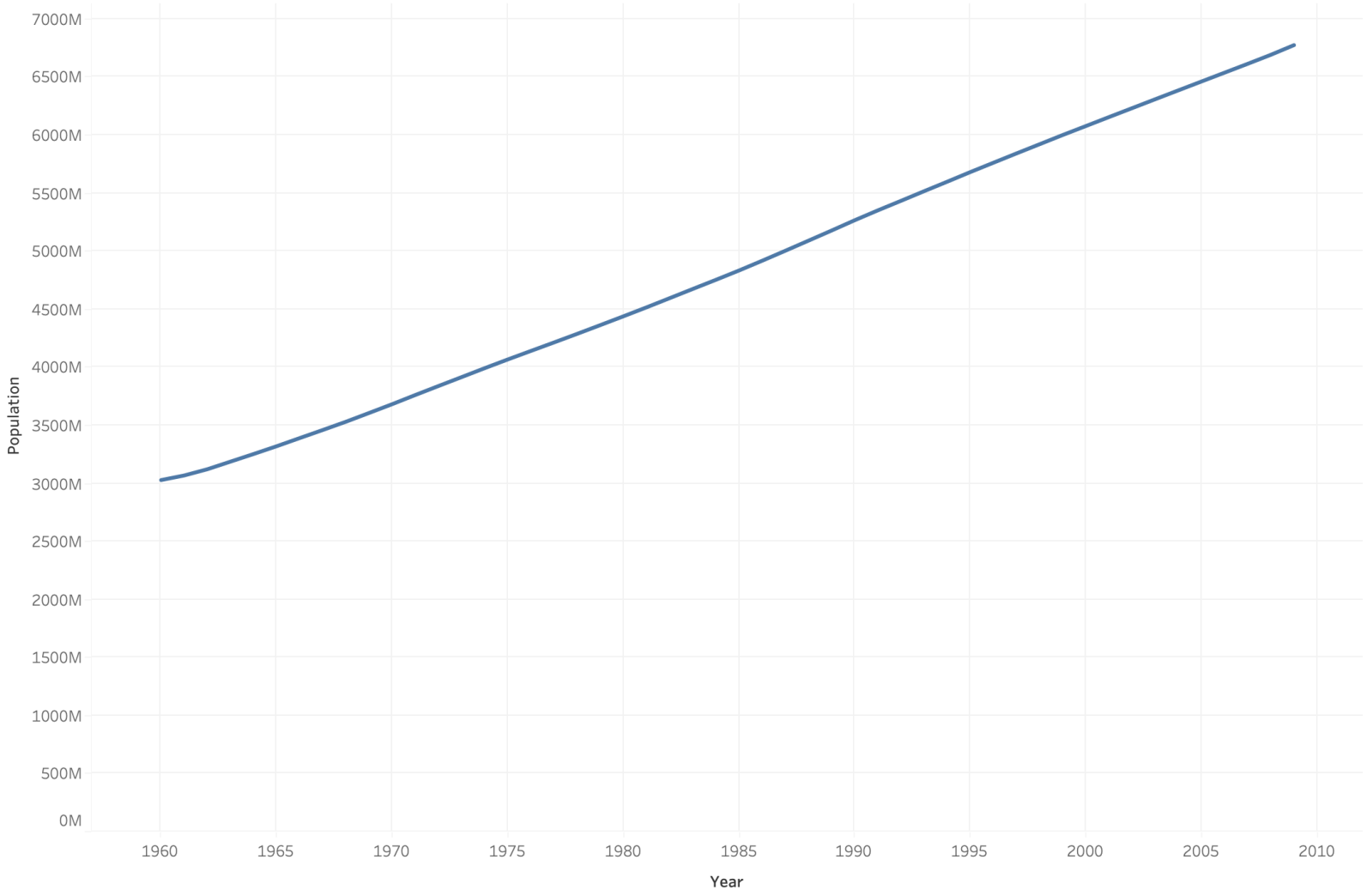
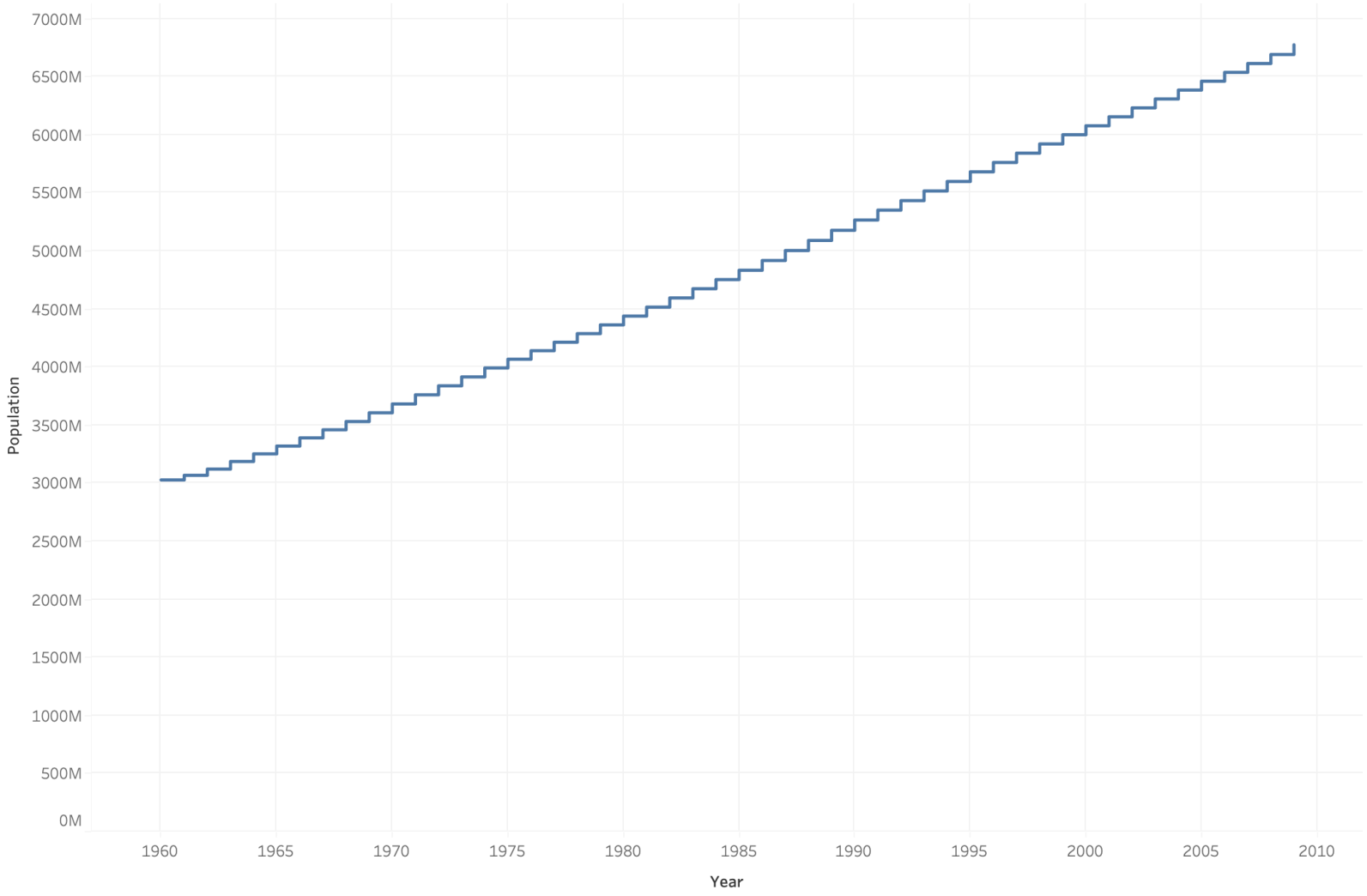
DSC 640
Inman, Gracie
Weeks 3 + 4
Line and Step Charts
01/07/24

Tableau Line Chart



The trend of sum of Population for Year.

Tableau Step Chart



The trend of sum of Population for Year.

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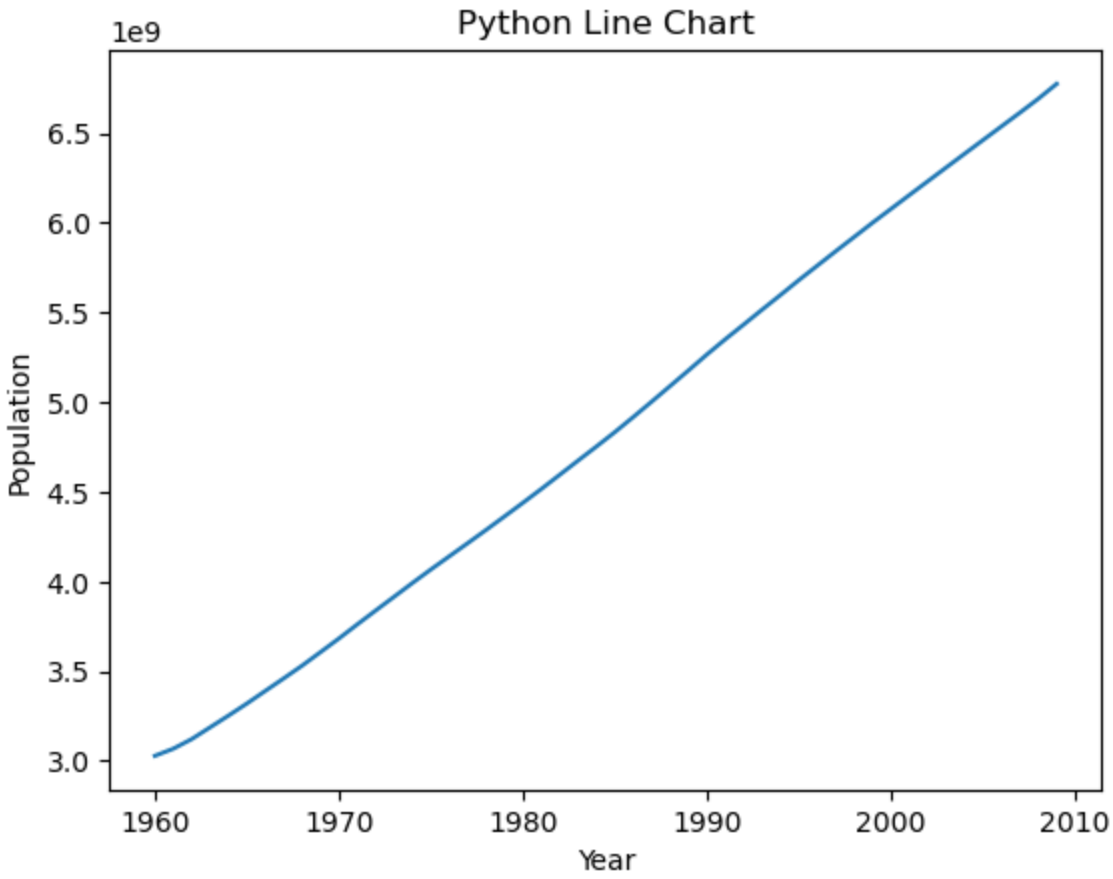
In [2]:
```
# Load libraries
import pandas as pd
import matplotlib.pyplot as plt
```

In [3]:
```
# Read data
df = pd.read_excel('world-population.xlsm')
df.head()
```

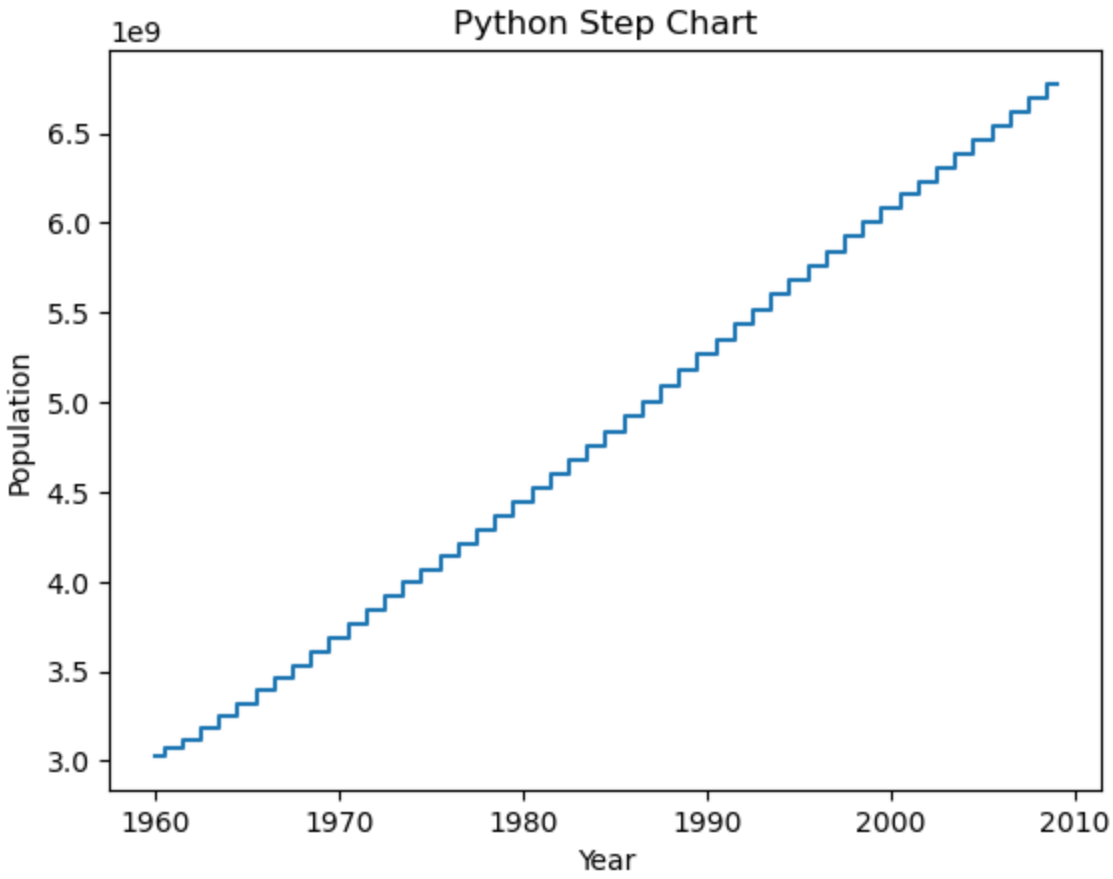
Out[3]:

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

In [4]:
```
# Line Chart
plt.plot(df['Year'], df['Population'])
plt.xlabel('Year')
plt.ylabel('Population')
plt.title('Python Line Chart')
plt.show()
```



In [5]:
```
# Step Chart
plt.step(df['Year'], df['Population'], where='mid')
plt.xlabel('Year')
plt.ylabel('Population')
plt.title('Python Step Chart')
plt.show()
```


Python Step Chart
1e9
6.5
6.0
5.5
5.0
4.5
4.0
3.5
3.0
Population
1960
1970
1980
1990
2000
2010
Year

In [ ]:

R Line and Step Charts (Weeks 3 + 4)

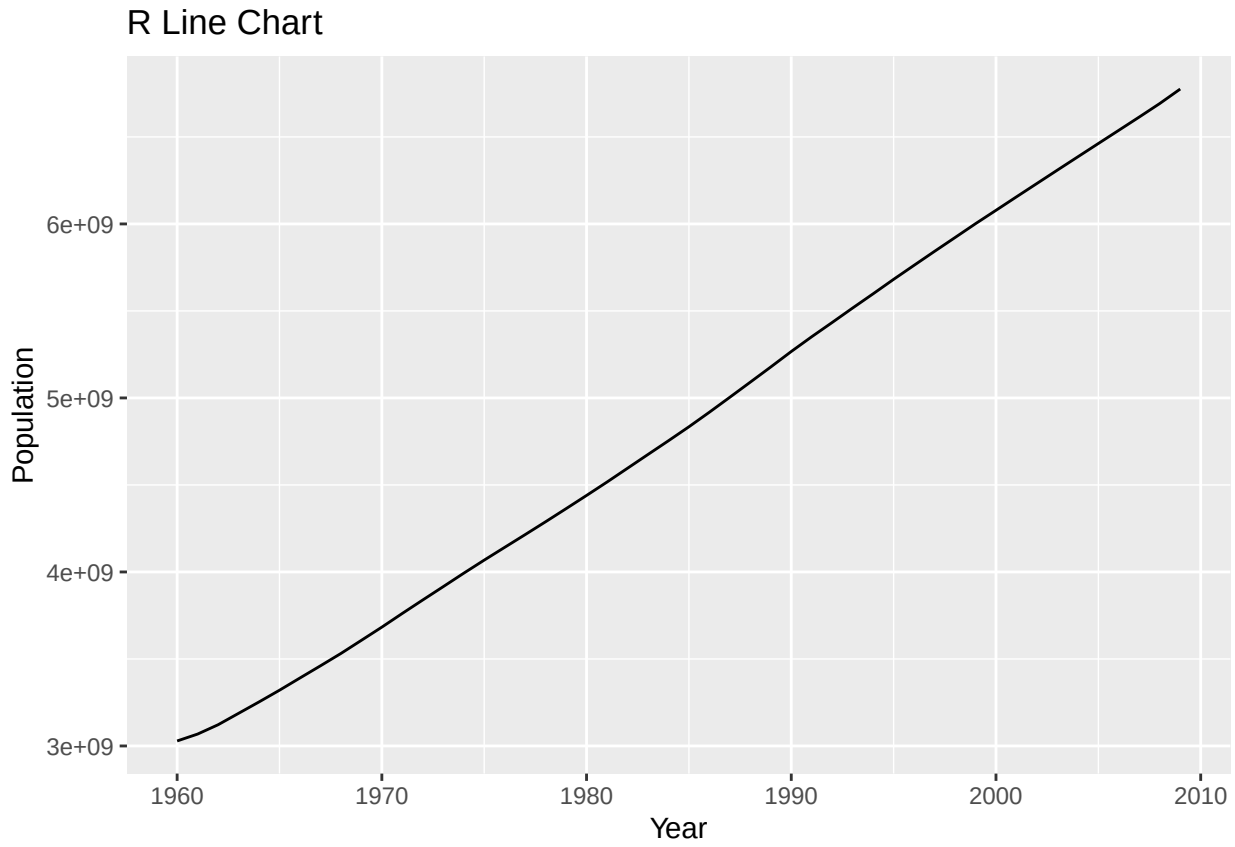
Gracie Inman

2024-01-07

```
# Load library
library(ggplot2)
```

```
# Load Data
df <- readxl::read_excel('/Users/gracieinman/Downloads/ex2-2 2/world-population.xlsm')
```

```
# R Line Chart
ggplot(df, aes(x = Year, y = Population)) +
  geom_line() +
  labs(x = 'Year', y = 'Population', title = 'R Line Chart')
```



```r
# R Step Chart
ggplot(df, aes(x = Year, y = Population)) +
  geom_step() +
  labs(x = 'Year', y = 'Population', title = ' R Step Chart')
```