

```
In [1]: #load libraries
import pandas as pd
import matplotlib.pyplot as plt
```

```
In [2]: #import data as dataframe
data = pd.read_excel('world-population.xlsm')
```

```
In [3]: data.info()

<class 'pandas.core.frame.DataFrame'>
RangeIndex: 50 entries, 0 to 49
Data columns (total 2 columns):
 #   Column      Non-Null Count  Dtype
---  -
 0   Year        50 non-null    int64
 1   Population  50 non-null    int64
dtypes: int64(2)
memory usage: 928.0 bytes
```

```
In [4]: data.head()
```

```
Out[4]:
```

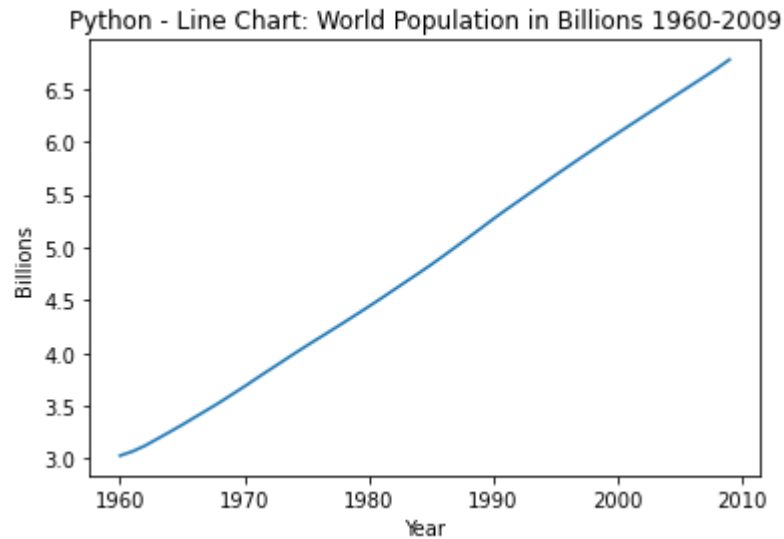
	Year	Population
0	1960	3028654024
1	1961	3068356747
2	1962	3121963107
3	1963	3187471383
4	1964	3253112403

```
In [5]: #create column for billions
data['PopinB'] = data['Population'] / 1000000000
```

Line Chart

```
In [6]: x = data['Year']  
y = data['PopinB']  
  
plt.plot(x,y)  
plt.xlabel("Year") # X-axis Label  
plt.ylabel("Billions") # Y-axis Label  
plt.title("Python - Line Chart: World Population in Billions 1960-2009") # title
```

Out[6]: Text(0.5, 1.0, 'Python - Line Chart: World Population in Billions 1960-2009')



Step Chart

```
In [7]: x = data['Year']  
y = data['PopinB']  
  
plt.step(x,y)  
plt.xlabel("Year") # X-axis Label  
plt.ylabel("Billions") # Y-axis Label  
plt.title("Python - Step Chart: World Population in Billions 1960-2009") # title
```

Out[7]: Text(0.5, 1.0, 'Python - Step Chart: World Population in Billions 1960-2009')

