

Python Code

```
In [2]: import pandas as pd
import numpy as np
import seaborn as sns
import matplotlib.pyplot as plt
%matplotlib inline
from numerize import numerize
import matplotlib.ticker as ticker
from matplotlib.ticker import FuncFormatter
```

```
In [3]: df = pd.read_excel('world-population.xlsm', sheet_name='world-population')

plt.rcParams['figure.figsize'] = [10,6]

sns.set(font_scale = 1.3)
sns.set_style("ticks")

def billions(x, pos):
    return f'{x / 1000000000}'

## Line Chart
ax = sns.lineplot(data=df, x="Year", y="Population", color= '#484890', lw=2)
ax.set_title("Python - Line Chart: Population by Year", loc='left', y=1.1, fontsize=20)
ax.yaxis.set_major_formatter(ticker.FuncFormatter(billions))
ax.set_ylim(0, 7e9)
plt.yticks([0,1.5e9, 3e9, 4.5e9, 6e9])
ax.set_xlabel("Year")
ax.set_ylabel("Population in Billion")

sns.despine()
plt.show()

## Step Chart
plt.rcParams['figure.figsize'] = [10,6]

sns.set(font_scale = 1.3)
sns.set_style("ticks")

ax = sns.lineplot(data=df, x="Year", y="Population", color= '#600060',drawstyle='steps-pre')
ax.set_title("Python - Step Chart: Population by Year", loc='left', y=1.1, fontsize=20)
ax.yaxis.set_major_formatter(ticker.FuncFormatter(billions))
plt.yticks([0,1.5e9, 3e9, 4.5e9, 6e9])
ax.set_xlabel("Year")
ax.set_ylabel("Population in Billion")

sns.despine()
plt.show()
```