

```
import pandas as pd
import numpy as np
import matplotlib.pyplot as plt

df = pd.read_csv(r'C:\\Users\\Leander Chris\\OneDrive\\Desktop\\
PRODIGY_DS_01\\
Metadata_Country_API_SP.POP.TOTL_DS2_en_csv_v2_21117.csv')

print(df)
```

| | Country Code | Region | IncomeGroup | \ |
|-----|--------------|----------------------------|---------------------|---|
| 0 | ABW | Latin America & Caribbean | High income | |
| 1 | AFE | NaN | NaN | |
| 2 | AFG | South Asia | Low income | |
| 3 | AFW | NaN | NaN | |
| 4 | AGO | Sub-Saharan Africa | Lower middle income | |
| .. | ... | ... | ... | |
| 260 | XKX | Europe & Central Asia | Upper middle income | |
| 261 | YEM | Middle East & North Africa | Low income | |
| 262 | ZAF | Sub-Saharan Africa | Upper middle income | |
| 263 | ZMB | Sub-Saharan Africa | Lower middle income | |
| 264 | ZWE | Sub-Saharan Africa | Lower middle income | |

| | SpecialNotes | \ |
|-----|---|---|
| 0 | NaN | |
| 1 | 26 countries, stretching from the Red Sea in t... | |
| 2 | The reporting period for national accounts dat... | |
| 3 | 22 countries, stretching from the westernmost ... | |
| 4 | The World Bank systematically assesses the app... | |
| .. | ... | |
| 260 | NaN | |
| 261 | The World Bank systematically assesses the app... | |
| 262 | Fiscal year end: March 31; reporting period fo... | |
| 263 | National accounts data were rebased to reflect... | |
| 264 | National Accounts data are reported in Zimbabw... | |

| | TableName | Unnamed: 5 |
|-----|-----------------------------|------------|
| 0 | Aruba | NaN |
| 1 | Africa Eastern and Southern | NaN |
| 2 | Afghanistan | NaN |
| 3 | Africa Western and Central | NaN |
| 4 | Angola | NaN |
| .. | ... | ... |
| 260 | Kosovo | NaN |
| 261 | Yemen, Rep. | NaN |
| 262 | South Africa | NaN |
| 263 | Zambia | NaN |
| 264 | Zimbabwe | NaN |

[265 rows x 6 columns]

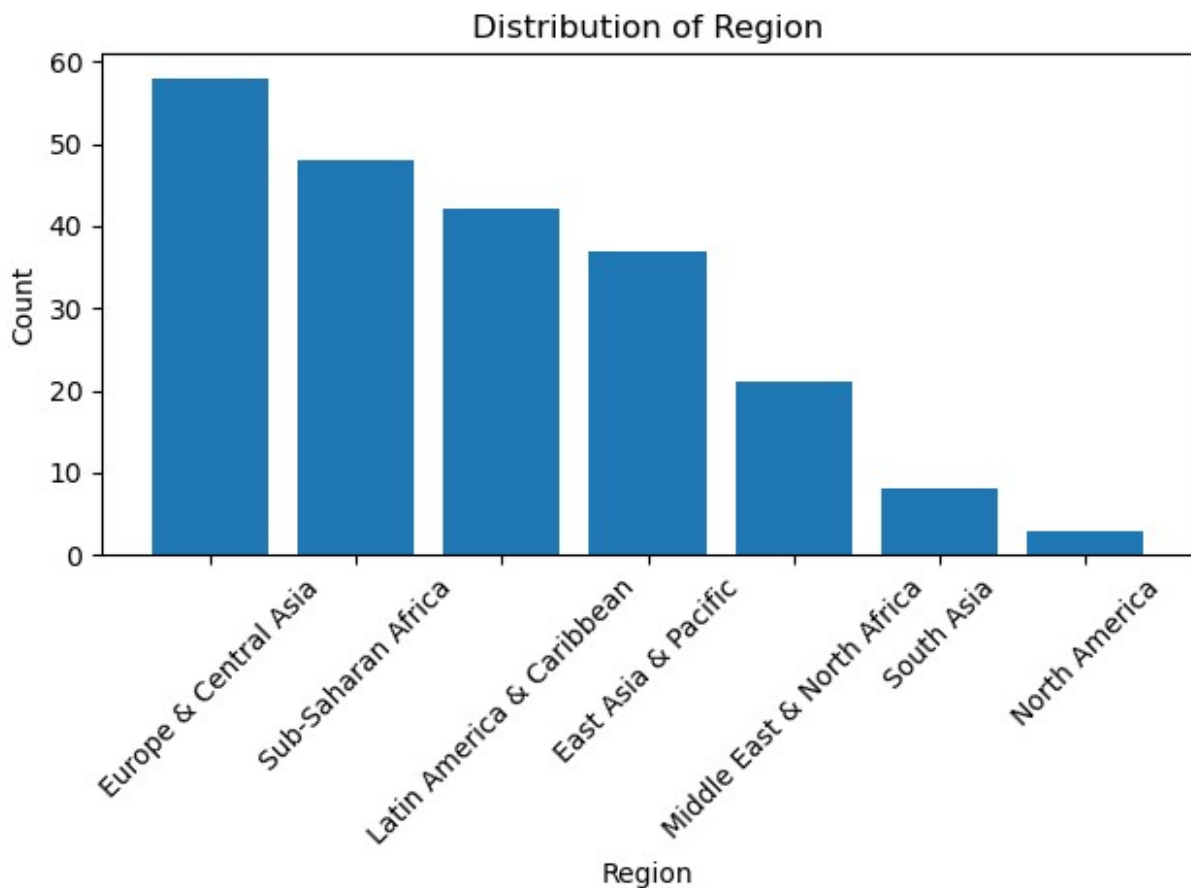
```

gender_counts = df['Region'].value_counts()
bar_width = 0.9
x=range(len(gender_counts.index))

plt.bar(gender_counts.index, gender_counts.values)
plt.xlabel('Region')
plt.ylabel('Count')
plt.title('Distribution of Region')

plt.xticks(x,gender_counts.index, rotation = 45)
plt.tight_layout()
plt.show()

```



```

df.shape
(265, 6)
df.info()
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 265 entries, 0 to 264
Data columns (total 6 columns):

```

| # | Column | Non-Null Count | Dtype |
|---|--------------|----------------|---------|
| 0 | Country Code | 265 non-null | object |
| 1 | Region | 217 non-null | object |
| 2 | IncomeGroup | 216 non-null | object |
| 3 | SpecialNotes | 127 non-null | object |
| 4 | TableName | 265 non-null | object |
| 5 | Unnamed: 5 | 0 non-null | float64 |

dtypes: float64(1), object(5)

memory usage: 12.6+ KB

df.describe()

| | Unnamed: 5 |
|-------|------------|
| count | 0.0 |
| mean | NaN |
| std | NaN |
| min | NaN |
| 25% | NaN |
| 50% | NaN |
| 75% | NaN |
| max | NaN |

df.isnull().sum()

| | |
|--------------|-----|
| Country Code | 0 |
| Region | 48 |
| IncomeGroup | 49 |
| SpecialNotes | 138 |
| TableName | 0 |
| Unnamed: 5 | 265 |

dtype: int64

df.info()

<class 'pandas.core.frame.DataFrame'>

RangeIndex: 265 entries, 0 to 264

Data columns (total 6 columns):

| # | Column | Non-Null Count | Dtype |
|---|--------------|----------------|---------|
| 0 | Country Code | 265 non-null | object |
| 1 | Region | 217 non-null | object |
| 2 | IncomeGroup | 216 non-null | object |
| 3 | SpecialNotes | 127 non-null | object |
| 4 | TableName | 265 non-null | object |
| 5 | Unnamed: 5 | 0 non-null | float64 |

dtypes: float64(1), object(5)

memory usage: 12.6+ KB