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

df = pd.read_csv(r"C:\\Users\\jayaraman\\OneDrive\\Pictures\\Desktop\\
Data science intership\\
Metadata_Country_API_SP.POP.TOTL_DS2_en_csv_v2_5871594.csv")

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
0                        Aruba
1      Africa Eastern and Southern
2                  Afghanistan
3      Africa Western and Central
4                       Angola
..                         ...
260                     Kosovo
261               Yemen, Rep.
262              South Africa
263                    Zambia
264                  Zimbabwe

[265 rows x 5 columns]
```
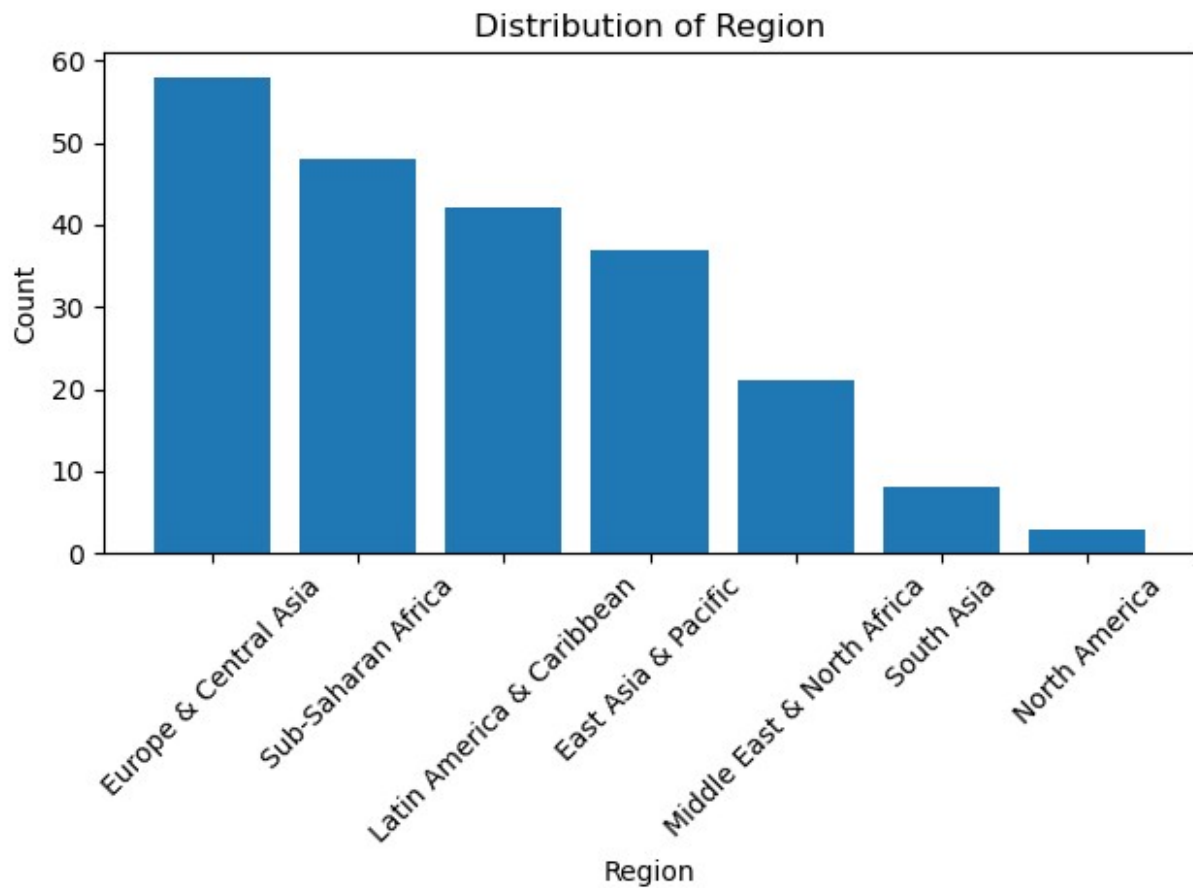
```python
gender_counts = df['Region'].value_counts()
bar_width = 0.9
x=range(len(gender_counts.index))


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()
```



```python
df.shape
```

```
(265, 5)
```

```python
df.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 265 entries, 0 to 264
Data columns (total 5 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  126 non-null    object
 4   TableName     265 non-null    object
dtypes: object(5)
memory usage: 10.5+ KB

df.describe()

       Country Code                       Region  IncomeGroup  \
count           265                          217          216
unique          265                            7            4
top             ABW    Europe & Central Asia  High income
freq              1                           58           82


                                          SpecialNotes TableName
count                                              126       265
unique                                             111       265
top        The reporting period for national accounts dat...    Aruba
freq                                                 7         1

df.isnull().sum()

Country Code      0
Region           48
IncomeGroup      49
SpecialNotes    139
TableName         0
dtype: int64
```