test2

July 2, 2024

[ ]:
```
import pandas as pd
import matplotlib.pyplot as plt
import numpy as np
```

[ ]:
```
df = pd.read_csv("F:\Study Material\Prodigy Ifotech Internship\Task␣
↪1\Metadata_Country_API_SP.POP.TOTL_DS2_en_csv_v2_23.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  Unnamed: 5
0                        Aruba         NaN
1    Africa Eastern and Southern         NaN
```

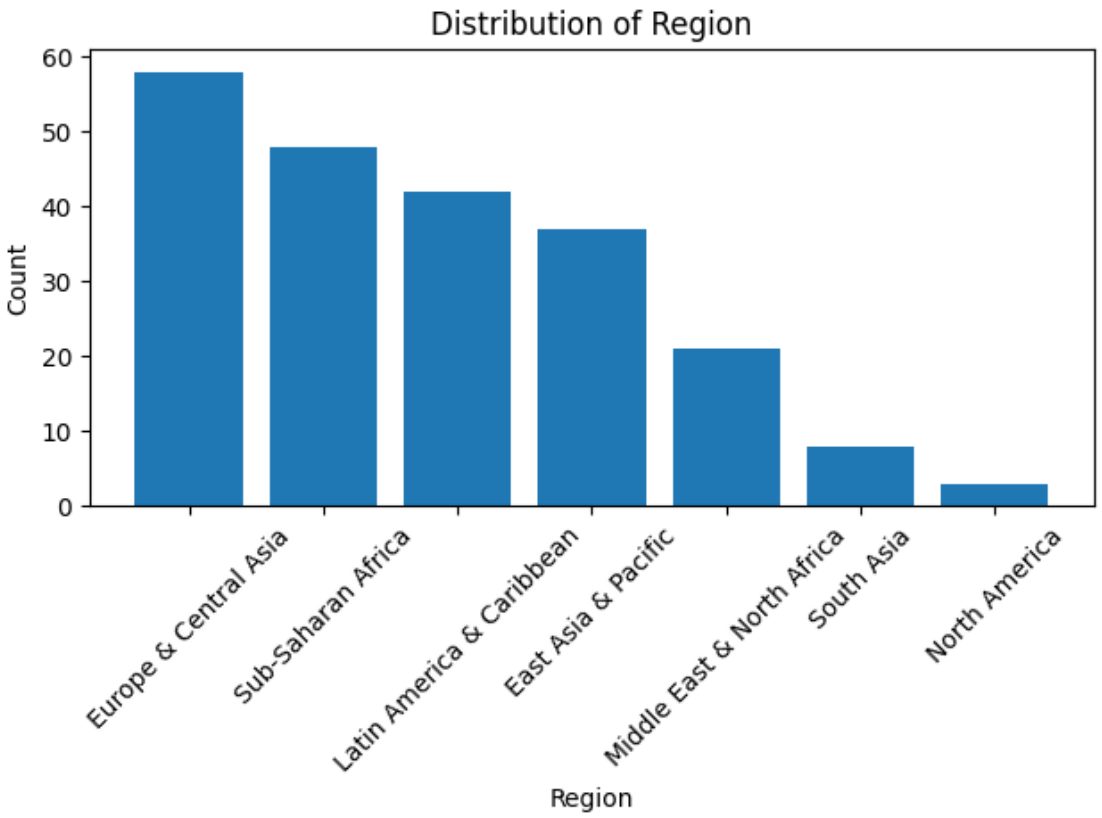
```
2                    Afghanistan         NaN
3     Africa Western and Central         NaN
4                         Angola         NaN
..                           …          …
260                       Kosovo         NaN
261                  Yemen, Rep.         NaN
262                 South Africa         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   126 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    139
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  126 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
```

[ ]:
```

```