worldbank2-1-checkpoint

March 7, 2024

```
import pandas as pd
[26]:
      import matplotlib.pyplot as plt
      import numpy as np
[27]: df = pd.read_csv(r"C:
       →\Users\lenovo\Downloads\PRODIGY_DS_01-Intern-Aakash-Jupyter-Lab-TASK-01-main\Aakash_WorldBa
       →POP.TOTL_DS2_en_csv_v2_5871594.csv")
[20]: df
[20]:
                           Country Name Country Code
                                                           Indicator Name \
      0
                                                        Population, total
                                  Aruba
                                                   ABW
                                                        Population, total
      1
           Africa Eastern and Southern
                                                   AFE
      2
                            Afghanistan
                                                  AFG
                                                        Population, total
                                                        Population, total
      3
            Africa Western and Central
                                                   AFW
      4
                                                   AGO
                                                        Population, total
                                  Angola
      . .
      261
                                                   XXX
                                                        Population, total
                                 Kosovo
      262
                                                   YEM
                                                        Population, total
                            Yemen, Rep.
                                                        Population, total
      263
                           South Africa
                                                   ZAF
                                                        Population, total
      264
                                  Zambia
                                                   ZMB
      265
                               Zimbabwe
                                                        Population, total
                                                   ZWE
                                                1961
          Indicator Code
                                   1960
                                                              1962
                                                                            1963 \
      0
             SP.POP.TOTL
                               54608.0
                                             55811.0
                                                           56682.0
                                                                         57475.0
      1
             SP.POP.TOTL
                           130692579.0
                                         134169237.0
                                                       137835590.0
                                                                    141630546.0
      2
             SP.POP.TOTL
                             8622466.0
                                           8790140.0
                                                         8969047.0
                                                                       9157465.0
      3
             SP.POP.TOTL
                            97256290.0
                                          99314028.0
                                                       101445032.0
                                                                    103667517.0
      4
             SP.POP.TOTL
                             5357195.0
                                           5441333.0
                                                         5521400.0
                                                                       5599827.0
      . .
      261
             SP.POP.TOTL
                              947000.0
                                            966000.0
                                                          994000.0
                                                                       1022000.0
      262
             SP.POP.TOTL
                             5542459.0
                                           5646668.0
                                                         5753386.0
                                                                       5860197.0
      263
             SP.POP.TOTL
                            16520441.0
                                          16989464.0
                                                        17503133.0
                                                                      18042215.0
      264
             SP.POP.TOTL
                                                         3323427.0
                             3119430.0
                                           3219451.0
                                                                       3431381.0
      265
             SP.POP.TOTL
                             3806310.0
                                           3925952.0
                                                         4049778.0
                                                                       4177931.0
                   1964
                                1965
                                                 2013
                                                               2014
                                                                             2015
```

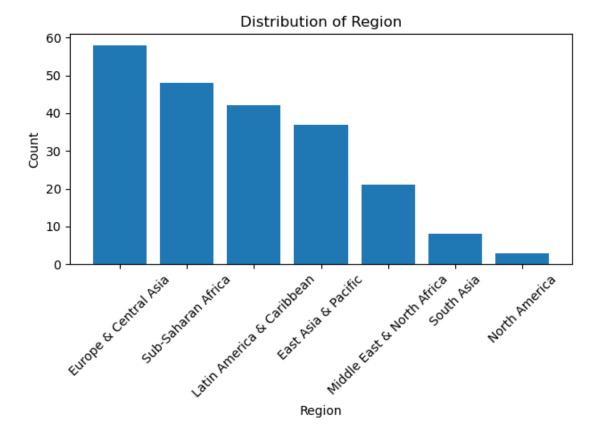
```
0
                                       102880.0
                                                     103594.0
                                                                   104257.0
         58178.0
                       58782.0
1
                  149742351.0
                                    567892149.0
     145605995.0
                                                  583651101.0
                                                               600008424.0
2
       9355514.0
                     9565147.0
                                     31541209.0
                                                   32716210.0
                                                                 33753499.0
3
     105959979.0
                  108336203.0
                                    387204553.0
                                                  397855507.0
                                                               408690375.0
4
       5673199.0
                     5736582.0
                                     26147002.0
                                                   27128337.0
                                                                 28127721.0
. .
261
       1050000.0
                     1078000.0
                                      1818117.0
                                                   1812771.0
                                                                 1788196.0
262
       5973803.0
                     6097298.0
                                     26984002.0
                                                   27753304.0
                                                                 28516545.0
263
      18603097.0
                    19187194.0
                                     53873616.0
                                                   54729551.0
                                                                 55876504.0
264
       3542764.0
                     3658024.0
                                     15234976.0
                                                   15737793.0
                                                                 16248230.0
265
       4310332.0
                     4447149.0
                                     13555422.0
                                                   13855753.0
                                                                 14154937.0
            2016
                          2017
                                        2018
                                                      2019
                                                                    2020
0
        104874.0
                      105439.0
                                    105962.0
                                                  106442.0
                                                               106585.0
                   632746570.0
1
     616377605.0
                                649757148.0
                                              667242986.0
                                                            685112979.0
2
      34636207.0
                    35643418.0
                                  36686784.0
                                               37769499.0
                                                             38972230.0
3
     419778384.0
                   431138704.0
                                442646825.0
                                              454306063.0
                                                            466189102.0
4
      29154746.0
                    30208628.0
                                  31273533.0
                                               32353588.0
                                                             33428486.0
. .
       1777557.0
                     1791003.0
                                   1797085.0
                                                1788878.0
                                                              1790133.0
261
262
      29274002.0
                    30034389.0
                                  30790513.0
                                               31546691.0
                                                             32284046.0
263
      56422274.0
                    56641209.0
                                  57339635.0
                                                             58801927.0
                                               58087055.0
264
      16767761.0
                    17298054.0
                                  17835893.0
                                                18380477.0
                                                             18927715.0
265
      14452704.0
                    14751101.0
                                  15052184.0
                                               15354608.0
                                                             15669666.0
            2021
                          2022
0
        106537.0
                      106445.0
1
     702977106.0
                  720839314.0
2
      40099462.0
                    41128771.0
3
     478185907.0
                  490330870.0
4
      34503774.0
                    35588987.0
. .
261
       1786038.0
                     1761985.0
262
      32981641.0
                    33696614.0
263
      59392255.0
                    59893885.0
264
      19473125.0
                    20017675.0
265
      15993524.0
                    16320537.0
[266 rows x 67 columns]
```

[28]: print(df.columns)

```
[29]: 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.title('Distribution of Region')
```



```
[30]: df.shape
[30]: (265, 6)
[31]: 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	${\tt IncomeGroup}$	216 non-null	object
3	${\tt SpecialNotes}$	127 non-null	object
4	TableName	265 non-null	object
5	Unnamed: 5	0 non-null	float64

dtypes: float64(1), object(5)

memory usage: 12.5+ KB

[32]: df.describe()

```
[32]:
              Unnamed: 5
                      0.0
      count
                      NaN
      mean
      std
                      NaN
                      NaN
      min
      25%
                      NaN
      50%
                      NaN
      75%
                      NaN
      max
                      NaN
```

[33]: df.isnull().sum()

[33]: Country Code 0
Region 48
IncomeGroup 49
SpecialNotes 138
TableName 0
Unnamed: 5 265

dtype: int64

[34]: df.info()

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

Non-Null Count Dtype Column 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 TableName 265 non-null object 5 Unnamed: 5 0 non-null float64

dtypes: float64(1), object(5) memory usage: 12.5+ KB

[]: