

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

```
df=pd.read_csv("/content/drive/MyDrive/ProdigyInfotech/Metadata_Country_API_SP.POP.TOTL_DS2_en_csv_v2_6224560.csv")
```

df

	Country Code	Region	IncomeGroup	SpecialNotes	TableName	Unnamed: 5
0	ABW	Latin America & Caribbean	High income		Aruba	NaN
1	AFE	NaN	NaN	26 countries, stretching from the Red Sea in t...	Africa Eastern and Southern	NaN
2	AFG	South Asia	Low income	The reporting period for national accounts dat...	Afghanistan	NaN
3	AFW	NaN	NaN	22 countries, stretching from the westernmost ...	Africa Western and Central	NaN
4	AGO	Sub-Saharan Africa	Lower middle income	The World Bank systematically assesses the app...	Angola	NaN
...	...	...	...	...	...	...
260	XKX	Europe & Central Asia	Upper middle income		Kosovo	NaN
261	YEM	Middle East & North Africa	Low income	The World Bank systematically assesses the app...	Yemen, Rep.	NaN
262	ZAF	Sub-Saharan Africa	Upper middle	Fiscal year end: March 31; reporting period fo...	South Africa	NaN

df.head()

	Country Code	Region	IncomeGroup	SpecialNotes	TableName	Unnamed: 5
0	ABW	Latin America & Caribbean	High income	NaN	Aruba	NaN
1	AFE	NaN	NaN	26 countries, stretching from the Red Sea in t...	Africa Eastern and Southern	NaN

```
df.tail()
```

	Country Code	Region	IncomeGroup	SpecialNotes	TableName	Unnamed: 5
260	XKX	Europe & Central Asia	Upper middle income	NaN	Kosovo	NaN
261	YEM	Middle East & North Africa	Low income	The World Bank systematically assesses the app...	Yemen, Rep.	NaN
262	ZAF	Sub-Saharan Africa	Upper middle income	Fiscal year end: March 31; reporting period fo...	South Africa	NaN
263	ZMB	Sub-Saharan Africa	Lower middle income	National accounts data were rebased to reflect...	Zambia	NaN
264	ZWE	Sub-Saharan Africa	Lower middle income	National Accounts data are reported in Zimbabw...	Zimbabwe	NaN

```
df.shape
```

```
(265, 6)
```

```
df.columns
```

```
Index(['Country Code', 'Region', 'IncomeGroup', 'SpecialNotes', 'TableName',
      'Unnamed: 5'],
      dtype='object')
```

```
df.dtypes
```

```
Country Code    object
Region          object
IncomeGroup     object
SpecialNotes    object
TableName       object
Unnamed: 5      float64
dtype: object
```

```
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: 12.5+ KB
```

```
df.describe()
```

Unnamed: 5

count	0.0
mean	NaN
std	NaN
min	NaN
25%	NaN
50%	NaN
75%	NaN
max	NaN

```
df=df.fillna(method="ffill")
df.head()
```

	Country Code	Region	IncomeGroup	SpecialNotes	TableName	Unnamed: 5
0	ABW	Latin America & Caribbean	High income	NaN	Aruba	NaN
1	AFE	Latin America & Caribbean	High income	26 countries, stretching from the Red Sea in t...	Africa Eastern and Southern	NaN
2	AFG	South Asia	Low income	The reporting period for national accounts dat	Afghanistan	NaN

```
df['Country Code'].unique()
```

```
array(['ABW', 'AFE', 'AFG', 'AFW', 'AGO', 'ALB', 'AND', 'ARB', 'ARE',
      'ARG', 'ARM', 'ASM', 'ATG', 'AUS', 'AUT', 'AZE', 'BDI', 'BEL',
      'BEN', 'BFA', 'BGD', 'BGR', 'BHR', 'BHS', 'BIH', 'BLR', 'BLZ',
      'BMU', 'BOL', 'BRA', 'BRB', 'BRN', 'BTN', 'BWA', 'CAF', 'CAN',
      'CEB', 'CHE', 'CHI', 'CHL', 'CHN', 'CIV', 'CMR', 'COD', 'COG',
      'COL', 'COM', 'CPV', 'CRI', 'CSS', 'CUB', 'CUW', 'CYM', 'CYP',
      'CZE', 'DEU', 'DJI', 'DMA', 'DNK', 'DOM', 'DZA', 'EAP', 'EAR',
      'EAS', 'ECA', 'ECS', 'ECU', 'EGY', 'EMU', 'ERI', 'ESP', 'EST',
      'ETH', 'EUU', 'FCS', 'FIN', 'FJI', 'FRA', 'FRO', 'FSM', 'GAB',
      'GBR', 'GEO', 'GHA', 'GIB', 'GIN', 'GMB', 'GNB', 'GNQ', 'GRC',
      'GRD', 'GRL', 'GTM', 'GUM', 'GUY', 'HIC', 'HKG', 'HND', 'HPC',
      'HRV', 'HTI', 'HUN', 'IBD', 'IBT', 'IDA', 'IDB', 'IDN', 'IDX',
      'IMN', 'IND', 'IRL', 'IRN', 'IRQ', 'ISL', 'ISR', 'ITA', 'JAM',
      'JOR', 'JPN', 'KAZ', 'KEN', 'KGZ', 'KHM', 'KIR', 'KNA', 'KOR',
      'KWT', 'LAC', 'LAO', 'LBN', 'LBR', 'LBY', 'LCA', 'LCN', 'LDC',
      'LIC', 'LIE', 'LKA', 'LMC', 'LMY', 'LSO', 'LTE', 'LTU', 'LUX',
      'LVA', 'MAC', 'MAF', 'MAR', 'MCO', 'MDA', 'MDG', 'MDV', 'MEA',
      'MEX', 'MHL', 'MIC', 'MKD', 'MLI', 'MLT', 'MMR', 'MNA', 'MNE',
      'MNG', 'MNP', 'MOZ', 'MRT', 'MUS', 'MWI', 'MYS', 'NAC', 'NAM',
      'NCL', 'NER', 'NGA', 'NIC', 'NLD', 'NOR', 'NPL', 'NRU', 'NZL',
      'OED', 'OMN', 'OSS', 'PAK', 'PAN', 'PER', 'PHL', 'PLW', 'PNG',
      'POL', 'PRE', 'PRI', 'PRK', 'PRT', 'PRY', 'PSE', 'PSS', 'PST',
      'PYF', 'QAT', 'ROU', 'RUS', 'RWA', 'SAS', 'SAU', 'SDN', 'SEN',
      'SGP', 'SLB', 'SLE', 'SLV', 'SMR', 'SOM', 'SRB', 'SSA', 'SSD',
      'SSF', 'SST', 'STP', 'SUR', 'SVK', 'SVN', 'SWE', 'SWZ', 'SXM',
      'SYC', 'SYR', 'TCA', 'TCD', 'TEA', 'TEC', 'TGO', 'THA', 'TJK',
      'TKM', 'TLA', 'TLS', 'TMN', 'TON', 'TSA', 'TSS', 'TTO', 'TUN',
      'TUR', 'TUV', 'TZA', 'UGA', 'UKR', 'UMC', 'URY', 'USA', 'UZB',
      'VCT', 'VEN', 'VGB', 'VIR', 'VNM', 'VUT', 'WLD', 'WSM', 'XKX',
      'YEM', 'ZAF', 'ZMB', 'ZWE'], dtype=object)
```

```
import seaborn as sns
print(df.head())

# Create a bar chart or histogram
# Replace 'column_name' with the actual column name you want to visualize

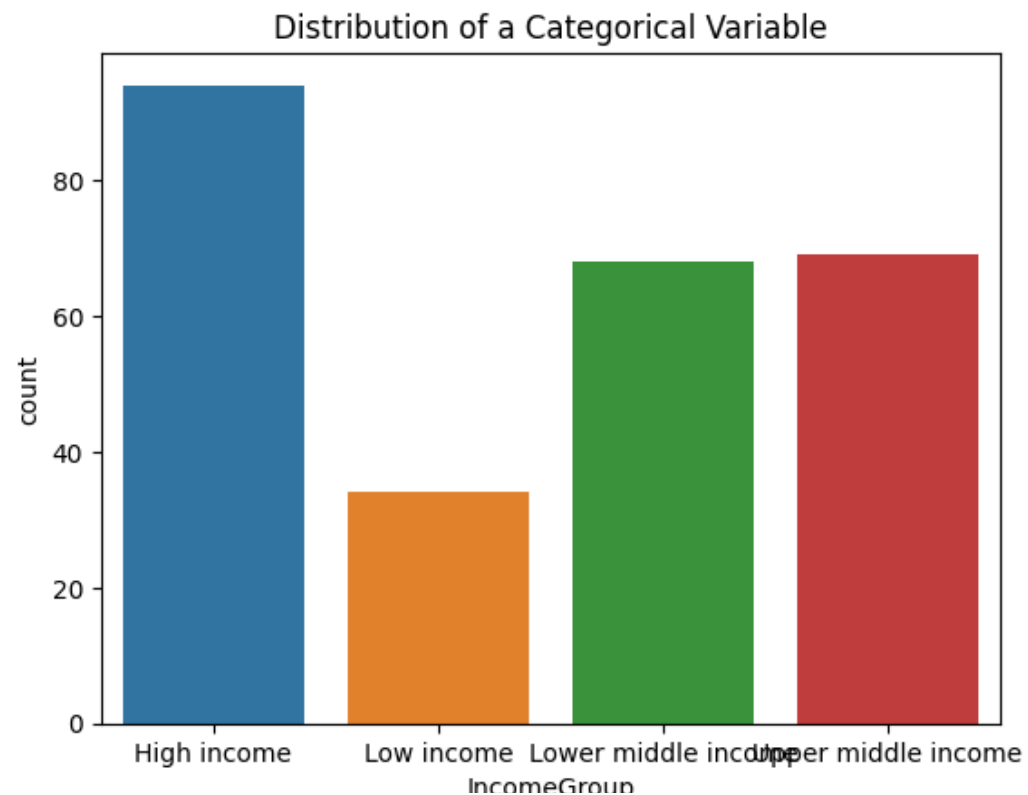
# Bar chart for a categorical variable
sns.countplot(x='IncomeGroup', data=df)
plt.title('Distribution of a Categorical Variable')
plt.show()

# Histogram for a continuous variable
plt.hist(df['Country Code'], bins=20, edgecolor='black')
plt.title('Distribution of a Continuous Variable')
plt.xlabel('Country Code')
plt.ylabel('TableName')
plt.show()
```

	Country Code	Region	IncomeGroup	\
0	ABW	Latin America & Caribbean	High income	
1	AFE	Latin America & Caribbean	High income	
2	AFG	South Asia	Low income	
3	AFW	South Asia	Low income	
4	AGO	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...	

	TableName	Unnamed: 5
0	Aruba	NaN
1	Africa Eastern and Southern	NaN
2	Afghanistan	NaN
3	Africa Western and Central	NaN
4	Angola	NaN



## Distribution of a Continuous Variable

Start coding or [generate](#) with AI.

