

```
import pandas as pd

import matplotlib.pyplot as plt

# Load dataset

df = pd.read_csv('API_SP.POP.TOTL_DS2_en_csv_v2_38144.csv', skiprows=4)

print(df.head())

#performed data cleaning

df_clean = df[['Country Name', '2022']].dropna()

df_clean = df_clean.sort_values(by='2022', ascending=False).head(20)

#bar chart

plt.figure(figsize=(12, 6))

plt.bar(df_clean['Country Name'], df_clean['2022'])

plt.xticks(rotation=75)

plt.xlabel('Country')

plt.ylabel('Population in 2022')

plt.title('Top 20 Countries by Population (2022)')

plt.tight_layout()

plt.show()

#histogram

plt.figure(figsize=(10, 6))

plt.hist(df['2022'].dropna(), bins=20, color='skyblue', edgecolor='black')

plt.xlabel('Population')

plt.ylabel('Number of Countries')

plt.title('Population Distribution Across Countries (2022)')

plt.show()
```