

QTM350-hw5

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HW5

Q1 Load Data

```
import pandas as pd
data = pd.read_csv("wdi.csv")
```

Q2 Exploratory Data Analysis

```
# Find which country has the highest GDP per capita
country_with_highest_gdp = data.loc[data['gdp_per_capita'].idxmax()]['country']
print(f"The country with the highest GDP per capita is {country_with_highest_gdp}. Its gdp is")

# Find which country has the highest GDP growth rate
country_with_highest_gdp_growth = data.loc[data['gdp_growth_rate'].idxmax()]['country']
print(f"The country with the highest GDP growth rate is {country_with_highest_gdp_growth} Its")

# Calculate the average inflation rate
average_inflation_rate = data['inflation_rate'].mean()
print(f"The average inflation rate across all countries is {average_inflation_rate:.2f}%")
```

The country with the highest GDP per capita is Monaco. Its gdp is 240862.18.

The country with the highest GDP growth rate is Guyana Its gdp growth rate is 63.44%.

The average inflation rate across all countries is 12.49%.

Q3 Two Plots Showing My Data Analysis

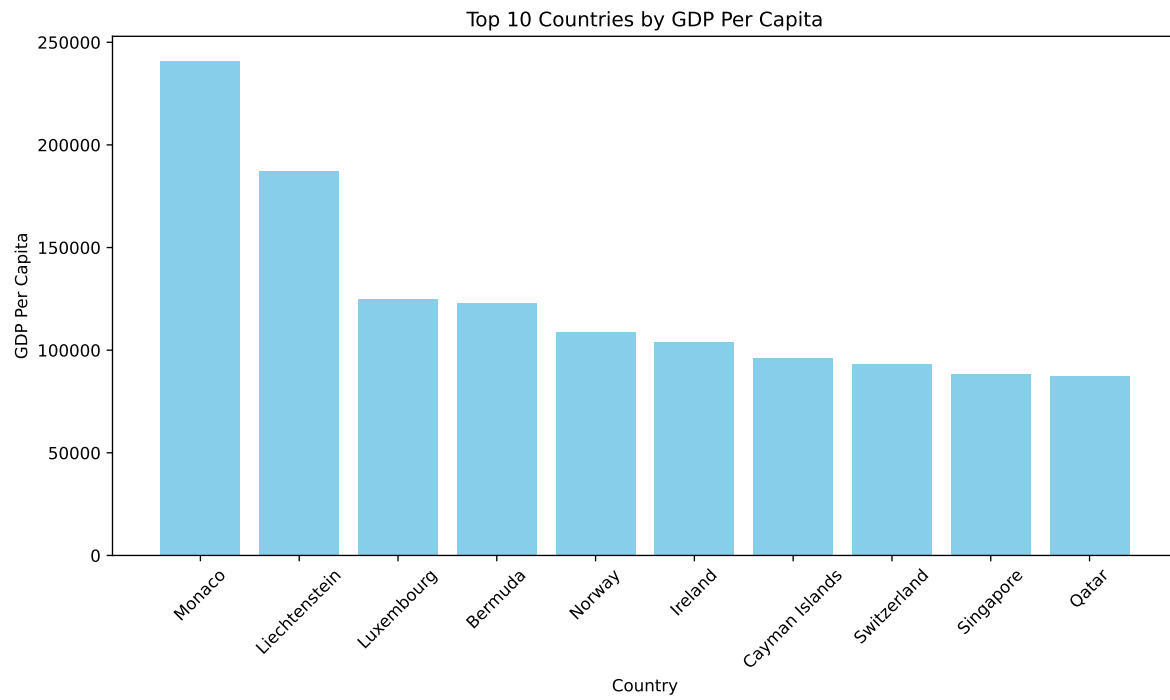


Figure 1: Top 10 countries by GDP per capita. Data Source: (World Bank 2025)

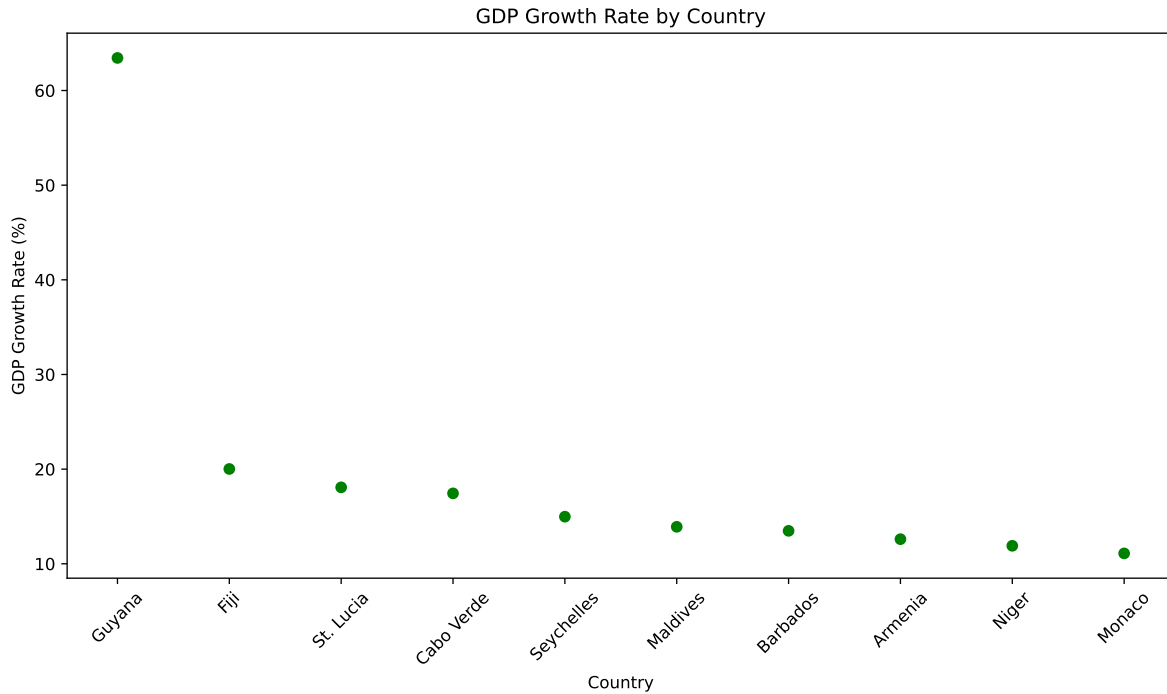


Figure 2: Top 10 countries by GDP Growth Rate. Data Source: (World Bank 2025)

Q5 Table of Key statistics

Table 1: Table of Key Statistics

Country	GDP Per Capita	GDP Growth Rate	Inflation Rate	Why Important?
Monaco	240862.18	11.10	Unknown	Highest GDP
Guyana	18199.47	63.43	6.115	Highest GDP growth
Lebanon	3823.94	-0.63	171.20	Highest inflation

Q6 Cross-reference

From Figure 1, we can see that the country that has the highest GDP per capita is Monaco. From Figure 2, we can see that the country that has the highest GDP growth rate is Guyana. We can see from Table 1 that their corresponding GDP, GDP growth rate, and inflation rates.

Q7

From Ahmad and Schreyer (2016), we learned how is gdp changing in the digital era. From Dynan and Sheiner (2018), we learn how gdp measure the economic well-being.

Ahmad, Nadim, and Paul Schreyer. 2016. “Measuring GDP in a Digitalised Economy.”

Dynan, Karen, and Louise Sheiner. 2018. “GDP as a Measure of Economic Well-Being.” *Work. Pap* 43.

World Bank. 2025. “World Development Indicators.” <https://data.worldbank.org/indicator/NY.GDP.PCAP.CD>.