

Homework 2

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Overview

This quarto file is my homework 2 submission for Data 624 : Predictive Analytics.

Chapter 3 Exercises (Hyndman)

```
import pandas as pd # data wrangling
import numpy as np # linear algebra

# data visualization
import matplotlib.pyplot as plt
import seaborn as sns
```

Exercise 1

Consider the GDP information in `global_economy`.

Plot the GDP per capita for each country over time. Which country has the highest GDP per capita?

```
# read in the data from R generated csv file
df_global_economy = pd.read_csv("data/global_economy.csv", parse_dates=["Year"], index_col=["Year"])
df_global_economy["GDP_Per_Capita"] = (df_global_economy["GDP"] / df_global_economy["Population"])

# calculate gdp per capita
df_gdp_per_capita = df_global_economy[["Country", "GDP_Per_Capita", "GDP", "Population"]]

#group by country
df_grouped = df_gdp_per_capita.groupby("Country")
```