1. Please download the data from the World Bank’s data API for all countries, focusing on the following key macroeconomic and environmental indicators:

CO2 emissions (metric tons per capita)

GDP per capita (PPP, constant 2017 international $)

Research and development expenditures (% of GDP)

Trade (% of GDP)

Renewable energy consumption (% of total final energy consumption)

Medium and high-tech industry value-added (% of manufacturing)

Urban population (% of total population)

Energy use (kg of oil equivalent per capita)

The data should be retrieved for all available years and then filtered to include only the years from 1990 to 2023. Once the data is filtered, save the dataset as a CSV file for further analysis. Be sure to properly label the dataset and ensure that the indicators are clearly identified.

EN.ATM.CO2E.PC – CO2 emissions (metric tons per capita)

NY.GDP.PCAP.PP.KD – GDP per capita, PPP (constant 2017 international $)

GB.XPD.RSDV.GD.ZS – Research and development expenditure (% of GDP)

NE.TRD.GNFS.ZS – Trade (% of GDP)

EG.FEC.RNEW.ZS – Renewable energy consumption (% of total final energy consumption)

TX.VAL.TECH.MF.ZS – Medium and high-tech industry (value added % of manufacturing)

SP.URB.TOTL.IN.ZS – Urban population (% of total population)

EG.USE.PCAP.KG.OE – Energy use (kg of oil equivalent per capita)

1. Start from the DataFrame above. Create

 **a.** Filter the data for observations only for the country "USA".

 **b.** Filter the data for observations only for the year 2020.

 **c.** Filter the data for observations only for the indicator 'EN.ATM.CO2E.PC' (CO2 emissions).

 **d.** Filter the CO2 emissions data for the years between 1994 and 2000.

 **e.** Filter the data for the country "USA" and the indicator 'EN.ATM.CO2E.PC' for the years 1994-2000.

 **f.** Remove any rows with missing data using dropna().

g. Set a multi-index based on country and date. And use that dataframe ins what follows

-Filter the data to show only observations for the USA and the indicator CO2 emissions (metric tons per capita).

-Calculate the average CO2 emissions for USA over the available years.