**Data visualization code script**

import pandas as pd

import matplotlib.pyplot as plt

import numpy as np

import seaborn as sns

# Define countries of interest

countries = ["United States", "United Kingdom", "Belgium", "Hungary", "Canada", "Australia", "Russia", "China", "France", "India"]

# Load data

data = pd.read\_csv("<https://data.worldbank.org>)

# Filter data for selected countries

df\_filtered = data[data["Country"].isin(countries)]

# Age Range of Disease Prevalence (Bar Chart)

age\_groups = df\_filtered.groupby("Age Range")["Disease Rate"].mean().reset\_index()

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

sns.barplot(x="Age Range", y="Disease Rate", data=age\_groups)

plt.xlabel("Age Range")

plt.ylabel("Disease Rate (decimal)")

plt.title("Disease Prevalence by Age Range in Selected Countries")

plt.xticks(rotation=45, ha="right")

plt.tight\_layout()

# Overall Disease Rate by country (Pie Chart)

disease\_rates = df\_filtered.groupby("Country")["Disease Rate"].mean().reset\_index()

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

plt.pie(disease\_rates["Disease Rate"], labels=disease\_rates["Country"], autopct="%1.1f%%")

plt.title("Overall Disease Rate in Selected Countries")

plt.axis("equal")

# Mortality Rate from household activities, Pollution (line graph)

pollution\_mortality = df\_filtered.groupby("Country")["Pollution Mortality Rate"].mean().reset\_index()

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

plt.stackplot(pollution\_mortality["Country"], pollution\_mortality["Pollution Mortality Rate"], labels=["Pollution, Household Activities Mortality Rate"])

plt.title("Mortality Rate from Household & Ambient Air Pollution (per 10,000 population)")

plt.axis("equal")

# Death Rate by Disease Type (line Graph)

communicable\_death\_rate = np.mean(df\_filtered[df\_filtered["Disease Type"] == "Communicable"]["Death Rate"])

noncommunicable\_death\_rate = np.mean(df\_filtered[df\_filtered["Disease Type"] == "Non-Communicable"]["Death Rate"])

total\_death\_rate = communicable\_death\_rate + noncommunicable\_death\_rate

plt.figure(figsize=(8, 5))

plt.bar(["Communicable", "Non-Communicable"], [communicable\_death\_rate, noncommunicable\_death\_rate], color=["brown", "blue"])

plt.xlabel("Disease Type")

plt.ylabel("Death Rate (%)")

plt.title("Death Rate Caused by Communicable and Non-Communicable Diseases (% of total)")

plt.ylim(0, total\_death\_rate \* 1.1)

# Save the final figure

plt.savefig("22082391.png", dpi=300)