

First Assignment

In this assignment, you need to apply basic Python skills, including sub-setting and visualization to analyze the World Values Survey (WVS) Wave 7 data. You need to select the rows on Hong Kong, and then select some variables to create a new data frame. Here are the step-by-step instructions:

First, import all the libraries and packages for analysis and visualization

Second, import the `WV7_Data`, the name of the imported data as “df”, and check the first ten rows (you need to download the data from my GitHub to your desktop)

Third, create a new data frame called “mydata1” by selecting only the rows of the ‘df’ where the country code (variable name is “B_COUNTRY”) is “344” (*this is the code for HK). Check the first ten rows.

Fourth, create a new data frame called “mydata2” by selecting following columns (“Q71”: confidence in government; “Q72”: confidence in political parties; “Q73”: confidence in parliament; “Q112”: perception of corruption; “Q121”: attitude to immigrants; “Q164”: Faith in God). Check the first ten rows.¹

Fifth, create a boxplot of “Q112” using Matplotlib (import matplotlib.pyplot as plt).²

Sixth, calculate the correlation matrix of mydata2 and draw a heatmap using seaborn (you may need to import seaborn as sns).³

Save your python file as a ipynb and upload it to Moodle (or to my email if that does not work).

¹ For the first four steps, see <https://github.com/eagoyang/GOV3219-Intro-to-Computational-PoliSci/blob/main/Part%20I%20Python%20Basics%20and%20Visualization/1%20Data%20and%20data%20selection.ipynb>

² <https://github.com/eagoyang/GOV3219-Intro-to-Computational-PoliSci/blob/main/Part%20I%20Python%20Basics%20and%20Visualization/2%20Central%20tendency%20and%20dispersion.ipynb>

³ <https://github.com/eagoyang/GOV3219-Intro-to-Computational-PoliSci/blob/main/Part%20I%20Python%20Basics%20and%20Visualization/3%20Exploratory%20Data%20Analysis.ipynb>