ECO239 1st Group R – Assignment Due Date: **December 7th (Friday)** at **13:00**

(No Late HWs accepted. Submit a hard-copy.)

Things to submit:

- 1. Your report (code, output including figures, your findings/comments).
- 2. Contribution Sheet (signed by all the group members)
- 3. Honor Code (signed by all the group members)
- *Just stable together. No plastic covers, please.

This is a group assignment. Create a group of **maximum 4** members. Carefully read Honor Code before starting your assignment.

Project A

Task 1: Select dataset for categorical and numerical variables from one of the following sites:

- 1. https://tuik.gov.tr
- 2. https://data.oecd.org
- 3. https://data.worldbank.org/

Task 2: Determine your "research question" (= Why are you analyzing this data?)

Task 3: Numerically summarize data.

- Select at least one numerical variable.
- Think carefully what kind of statistics you should report to answer your research question.
- Comment

Task 4: Graphically summarize data.

- Select at least one categorical variable.
- Select at least one numerical variable.
- Think carefully what kind of graphs are necessary to answer your research question.
- Comment

Task 5: Analyzing the relationship between two variables.

- Select two numerical variables => Generate a scatter plot.
- Select one numerical, one categorical variable => Generate a boxplot.
- Comment

Task 6: Report your findings regarding your research question.

Project B

For this project, use highgpa.csv data posted on the course webpage.

Conduct necessary analysis to answer the following research question.

Q: "What kind of characteristics do students with the higher GPA have?"