The purpose of this assignment is to apply the knowledge acquired throughout the course by conducting an exploratory analysis of the "Student Performance" dataset from the UCI Machine Learning

Repository.

This dataset, which aims to predict student performance in secondary education (high school), was obtained from https://archive.ics.uci.edu/dataset/320/student+performance, where detailed information regarding the variables and their descriptions can be found.

The objective of this assignment is to conduct an **exploratory data analysis (EDA)** in which you formulate several meaningful questions and answer them using appropriate **data visualization and summary techniques**.

It is essential that:

- You apply all the visualization techniques covered in the course (at least one bar chart, histogram, boxplot, and scatter plot), as well as at least one data summarization technique.
- 2. The chosen techniques are applied **appropriately according to the type of variable** (for instance, a histogram is not suitable for categorical data).
- 3. The graphics are visually appealing, with properly defined axis labels, titles, and legends (where applicable).
- 4. Each question is **clearly formulated**, and the corresponding answer includes a **well-explained interpretation** of the visual or summary technique used.
- 5. Attention is paid to the clarity and quality of both the script and the written report.

The assignment will be evaluated according to the **grading rubric provided in the attached Excel file**.

The student(s) must submit:

- A **clean and well-commented R script** that can be executed without modification (apart from setting the working directory).
- A report of no more than four sides (two pages). The report does not require a cover page, but it must clearly indicate the names of both students who completed the work.