

**Industry:**



**Group members:**

1.

2.

3.

**Description of the project:**

**Part 1.** A brief description of the data used in this project.

We have the data for two hydropowers measured daily for almost 8 years with the following structure:

Outflow.HHP1 → the outflow from the first hydropower in m^3 /sec

Inflow..HPP1 → the amount of water which enters in the first hydropower in m^3 /sec

Inflow.HPP2 → the amount of water which enters in the second hydropower in m^3 /sec

Production.HPP1 → the energy produced by the first hydropower in GWh

Production.HPP1 → the energy produced by the second hydropower in GWh

**Part 2.** A brief description of the preprocessing and the methodology used in this project.

We have imported the data as a csv file saved from the original excel sheet. We have cleaned the data of missing values and then we have replaced the outliers with the averages of each column. We saved the data in a new csv file. The steps are also commented in the google colab files and R files.

**Part 3.** A brief description of the results.

We used the SARIMA model and the TBAT model for prediction. There are exaplanations also in the files.