2023-2024 FALL
Machine Learning – Project 2

DUE DATE: 29/12/2023

You will implement decision tree classification to predict the ***acceptability*** of a car using 6 variables. These variables are:

- The price of the car with 4 categories: 1 to 4
- Maintenance prices with 4 categories: 1 to 4
- Number of doors with 4 categories: 2 to 5
- Capacity of the car (number of persons that fit) with 3 categories: 2,4,6
- Luggage size with 3 categories: 1 to 3
- Safety with 3 categories: 1 to 3

Download the provided data (trainDATA.xlsx), write your own codes for decision tree algorithm for classification. Provide your tree structure in your report. Use your tree to get the classification results for data provided in textDATA.xlsx. Submit your classification results in an excel file along with your report.

WRITE A FINAL REPORT, which includes your codes in an organized manner and the tree structure (you may plot it by hand and add the picture of it to the report). Do not forget to submit the results for the test data.

Note: Please save the zip file name as "***Name_Surname_ID.zip***". You must include the code in a working form and make sure you upload the correct or altered excel file.