

PAF-Karachi Institute of Economics and Technology
Course: Machine Learning (S2020)

Assignment – 2

- Note: 1. Individual student submission**
2. If your assignment fall in plagiarism, will not be graded
3. Possibility to conduct the viva of your code

Max marks : 20

Due Date: 28-4-2020

[Question – 1]

- (a) Decision tree is a method for work both classification and regression. The classification part with entropy with information gain we have done in class.
Your task describe the Decision tree for folloing points:
- (i) What is the decision tree for regression
 - (ii) Draw a decision tree diagram for regression
 - (iii) Solve an example decision tree for regression by using Gini index method
 - (iv) Fill following table by using decision tree code.

Decision Tree	Sensitivity	Specificity	Accuracy	Precision	AUC
Information Gain					
Gini Index					

Note: Data set is available at google classroom