

# Decision Tree-1

## Assignment Questions



- Q1. Describe the decision tree classifier algorithm and how it works to make predictions.**
- Q2. Provide a step-by-step explanation of the mathematical intuition behind decision tree classification.**
- Q3. Explain how a decision tree classifier can be used to solve a binary classification problem.**
- Q4. Discuss the geometric intuition behind decision tree classification and how it can be used to make predictions.**
- Q5. Define the confusion matrix and describe how it can be used to evaluate the performance of a classification model.**
- Q6. Provide an example of a confusion matrix and explain how precision, recall, and F1 score can be calculated from it.**
- Q7. Discuss the importance of choosing an appropriate evaluation metric for a classification problem and explain how this can be done.**
- Q8. Provide an example of a classification problem where precision is the most important metric, and explain why.**
- Q9. Provide an example of a classification problem where recall is the most important metric, and explain why.**

**Note:** Create your assignment in Jupyter notebook and upload it to GitHub & share that github repository link through your dashboard. Make sure the repository is public.