

Part 1-Ans

1) Decision Tree shows in tree.dot is developed from graphviz of Sklearn Library.

2) Values of Information Gain and Gini Index of the root node are as follows-----

a) From developed model

Information Gain = 0.83

Gini Index= 0.93

b) From Scikit learn

Information Gain =0.99

Gini Index=0.49

3) Labels generated on the test data and accuracy on the test data are as follows-- :

a) From developed model

Labels= ['yes', 'yes'] for both Gini and Information Gain

Accuracy= 100% (for both)

b) From Scikit learn

Labels= ['yes', 'yes'] for Gini and ['yes', 'no'] for Information Gain

Accuracy=100 % (Gini) and 50 % (Information Gain)