CS 6375

ASSIGNMENT \_\_\_\_\_\_2\_\_\_\_\_\_

Names of students in your group:

Pranathi Peri(pxp162530)

Nithin Vasireddy(nxv160230)

Number of free late days used: \_\_0\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_   
Note: You are allowed a **total** of 4 free late days for the **entire semester**. You can use at most 2 for each assignment. After that, there will be a penalty of 10% for each late day.

Please list clearly all the sources/references that you have used in this assignment.

Output of the Program :

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Before pruning

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Number of Training Instances :600

Number of Training Attributes:20

Total Number of nodes in the tree:275

Number of leaf nodes in the tree:138

Accuracy of the model on the training set:100.0

Number of validation instances:2000

Number of validation attributes:20

Accuracy of the model on the validation data set before pruning:75.9

Number of testing instances:2000

Number of testing attributes:20

Accuracy of the model on the testing data set:75.85

XO = 0 :

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After pruning

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Number of Training Instances :600

Number of Training Attributes:20

Total Number of nodes in the tree:271

Number of leaf nodes in the tree:136

Accuracy of the model on the training set:99.5

Number of validation instances:2000

Number of validation attributes:20

Accuracy of the model on the validation data set after pruning:76.25

Number of testing instances:2000

Number of testing attributes:20

Accuracy of the model on the testing data set:76.3