**Report on Accuracy of Test Data**

**For dataset 1:**

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Information Gain Heuristic\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

**The accuracy of decision tree on test data is : 78.189095**

**The accuracy of tree before pruning on validation set is : 76.38819**

**The accuracy of pruned tree for validation set is : 76.48824**

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Variance Impurity Heuristic\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

**The accuracy of decision tree on test data is : 78.189095**

**The accuracy of tree before pruning on validation set is : 76.38819**

**The accuracy of pruned tree for validation set is : 76.63832**

**For dataset 2:**

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Information Gain Heuristic\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

**The accuracy of decision tree on test data is : 75.626045**

**The accuracy of tree before pruning on validation set is : 77.96327**

**The accuracy of pruned tree for validation set is : 78.13022**

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Variance Impurity Heuristic\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

**The accuracy of decision tree on test data is : 76.46077**

**The accuracy of tree before pruning on validation set is : 78.798**

**The accuracy of pruned tree for validation set is : 78.96494**