4) Output for datasets

Wine Dataset -

```
Filepath is:wine.data.txt
enter 1 for gain,2 for gini 1
Accuracy in 1 fold is 84.18
Accuracy in 2 fold is 84.09
Accuracy in 3 fold is 87.43
Accuracy in 4 fold is 94.83
Accuracy in 5 fold is 92.49
Accuracy in 6 fold is 91.28
Accuracy in 7 fold is 94.74
Accuracy in 8 fold is 96.47
Accuracy in 9 fold is 97.04
Accuracy in 10 fold is 91.07
totalAccuracy is 91.36127556175481
```

```
Filepath is:wine.data.txt
enter 1 for gain,2 for gini 2
Accuracy in 1 fold is 85.88
Accuracy in 2 fold is 78.98
Accuracy in 3 fold is 85.14
Accuracy in 4 fold is 90.23
Accuracy in 5 fold is 90.75
Accuracy in 6 fold is 91.86
Accuracy in 7 fold is 91.81
Accuracy in 8 fold is 97.06
Accuracy in 9 fold is 92.9
Accuracy in 10 fold is 96.43
totalAccuracy is 90.10373000843576
```

Iris Dataset -

```
Filepath is:iris.data.txt
enter 1 for gain, 2 for gini : 1
Accuracy in 1 fold is 78.52
Accuracy in 2 fold is 91.89
Accuracy in 3 fold is 91.84
Accuracy in 4 fold is 84.25
Accuracy in 5 fold is 88.28
Accuracy in 6 fold is 79.17
Accuracy in 7 fold is 86.71
Accuracy in 8 fold is 87.32
Accuracy in 9 fold is 85.82
Accuracy in 10 fold is 89.29
totalAccuracy is 86.30797680946056
Filepath is:iris.data.txt
enter 1 for gain, 2 for gini : 2
Accuracy in 1 fold is 83.22
Accuracy in 2 fold is 69.59
```

Accuracy in 3 fold is 78.91 Accuracy in 4 fold is 84.25

```
Accuracy in 5 fold is 88.28
Accuracy in 6 fold is 83.33
Accuracy in 7 fold is 91.61
Accuracy in 8 fold is 90.14
Accuracy in 9 fold is 90.07
Accuracy in 10 fold is 92.14
totalAccuracy is 85.15464222827634
```

Diabetes Dataset

```
Filepath is:diabetes.data.txt
enter 1 for gain,2 for gini : 1
Accuracy in 1 fold is 52.3
Accuracy in 2 fold is 61.14
Accuracy in 3 fold is 65.46
Accuracy in 4 fold is 59.86
Accuracy in 5 fold is 60.71
Accuracy in 6 fold is 60.33
Accuracy in 7 fold is 59.39
Accuracy in 8 fold is 61.94
Accuracy in 9 fold is 58.01
Accuracy in 10 fold is 56.16
totalAccuracy is 59.530777751282855
```

```
Filepath is:diabetes.data.txt
enter 1 for gain, 2 for gini : 2
Accuracy in 1 fold is 67.54
Accuracy in 2 fold is 66.31
Accuracy in 3 fold is 65.19
Accuracy in 4 fold is 64.19
Accuracy in 5 fold is 62.76
Accuracy in 6 fold is 57.71
Accuracy in 7 fold is 62.45
Accuracy in 8 fold is 61.8
Accuracy in 9 fold is 59.29
Accuracy in 10 fold is 60.6
totalAccuracy is 62.78463963628782
```

Haberman Databaset

```
Filepath is:haberman.data.txt
enter 1 for gain,2 for gini : 1
Accuracy in 1 fold is 74.26
Accuracy in 2 fold is 73.67
Accuracy in 3 fold is 73.4
Accuracy in 4 fold is 72.45
Accuracy in 5 fold is 73.54
Accuracy in 6 fold is 51.74
Accuracy in 7 fold is 71.58
Accuracy in 8 fold is 72.7
Accuracy in 9 fold is 75.63
Accuracy in 10 fold is 72.1
totalAccuracy is 71.10520476613513
```

```
Filepath is:haberman.data.txt
enter 1 for gain,2 for gini : 2
Accuracy in 1 fold is 55.45
Accuracy in 2 fold is 65.67
Accuracy in 3 fold is 63.64
Accuracy in 4 fold is 60.88
Accuracy in 5 fold is 62.89
Accuracy in 6 fold is 62.15
Accuracy in 7 fold is 71.58
Accuracy in 8 fold is 64.18
Accuracy in 9 fold is 63.8
Accuracy in 10 fold is 63.04
totalAccuracy is 63.32784102614376
```

BankNote Dataset

```
Filepath is:banknote.txt
enter 1 for gain, 2 for gini : 1
Accuracy in 1 fold is 85.88
Accuracy in 2 fold is 88.79
Accuracy in 3 fold is 86.91
Accuracy in 4 fold is 87.74
Accuracy in 5 fold is 87.98
Accuracy in 6 fold is 87.5
Accuracy in 7 fold is 87.75
Accuracy in 8 fold is 86.88
Accuracy in 9 fold is 87.75
Accuracy in 10 fold is 86.49
totalAccuracy is 87.36601033338832
Filepath is:banknote.txt
enter 1 for gain, 2 for gini : 2
Accuracy in 1 fold is 86.11
Accuracy in 2 fold is 81.54
Accuracy in 3 fold is 90.68
Accuracy in 4 fold is 85.83
Accuracy in 5 fold is 87.02
Accuracy in 6 fold is 87.01
Accuracy in 7 fold is 87.62
Accuracy in 8 fold is 86.88
Accuracy in 9 fold is 88.75
Accuracy in 10 fold is 87.12
totalAccuracy is 86.85792059190206
```

Balance Scale and Weight data :

```
Filepath is:balanceScaleWeight.txt
enter 1 for gain,2 for gini : 1
Accuracy in 1 fold is 71.73
Accuracy in 2 fold is 65.74
Accuracy in 3 fold is 72.82
Accuracy in 4 fold is 70.22
Accuracy in 5 fold is 71.6
Accuracy in 6 fold is 70.8
Accuracy in 7 fold is 71.36
```

```
Accuracy in 8 fold is 71.75
Accuracy in 9 fold is 72.15
Accuracy in 10 fold is 72.39
totalAccuracy is 71.05478760618811
```

```
Filepath is:balanceScaleWeight.txt
enter 1 for gain, 2 for gini : 2
Accuracy in 1 fold is 72.7
Accuracy in 2 fold is 70.47
Accuracy in 3 fold is 72.49
Accuracy in 4 fold is 65.56
Accuracy in 5 fold is 71.26
Accuracy in 6 fold is 71.65
Accuracy in 7 fold is 72.9
Accuracy in 8 fold is 72.9
Accuracy in 9 fold is 72.15
Accuracy in 10 fold is 72.04
totalAccuracy is 71.31354514299385
```

HayesRoth DataSet

Filepath is:hayesRoth.txt

```
enter 1 for gain, 2 for gini : 2
Accuracy in 1 fold is 41.98
Accuracy in 2 fold is 38.46
Accuracy in 3 fold is 38.76
Accuracy in 4 fold is 23.44
Accuracy in 5 fold is 31.5
Accuracy in 6 fold is 40.48
Accuracy in 7 fold is 33.6
Accuracy in 8 fold is 39.52
Accuracy in 9 fold is 33.33
Accuracy in 10 fold is 36.89
totalAccuracy is 35.79504229439937
Filepath is:hayesRoth.txt
enter 1 for gain, 2 for gini
Accuracy in 1 fold is 25.19
Accuracy in 2 fold is 33.08
Accuracy in 3 fold is 36.43
Accuracy in 4 fold is 31.25
Accuracy in 5 fold is 41.73
Accuracy in 6 fold is 23.02
Accuracy in 7 fold is 41.6
Accuracy in 8 fold is 38.71
Accuracy in 9 fold is 28.46
Accuracy in 10 fold is 28.69
```

TA Evaluation Dataset

```
Filepath is:TAeval.txt
enter 1 for gain,2 for gini : 1
Accuracy in 1 fold is 36.67
Accuracy in 2 fold is 28.86
Accuracy in 3 fold is 33.78
```

totalAccuracy is 32.81535143415156

```
Accuracy in 5 fold is 2.05
Accuracy in 6 fold is 11.72
Accuracy in 7 fold is 19.44
Accuracy in 8 fold is 27.27
Accuracy in 9 fold is 24.65
Accuracy in 10 fold is 22.7
totalAccuracy is 23.57199663782543
Filepath is:TAeval.txt
enter 1 for gain, 2 for gini : 2
Accuracy in 1 fold is 41.33
Accuracy in 2 fold is 9.4
Accuracy in 3 fold is 26.35
Accuracy in 4 fold is 16.33
Accuracy in 5 fold is 20.55
Accuracy in 6 fold is 20.69
Accuracy in 7 fold is 31.25
Accuracy in 8 fold is 25.17
Accuracy in 9 fold is 22.54
Accuracy in 10 fold is 26.95
totalAccuracy is 24.055517988154513
Abalone DataSet
Filepath is:abalone.txt
enter 1 for gain, 2 for gini : 1
Accuracy in 1 fold is 51.23
Accuracy in 2 fold is 49.78
Accuracy in 3 fold is 47.28
Accuracy in 4 fold is 51.41
Accuracy in 5 fold is 48.13
Accuracy in 6 fold is 49.02
Accuracy in 7 fold is 47.95
Accuracy in 8 fold is 49.62
Accuracy in 9 fold is 51.32
Accuracy in 10 fold is 49.61
totalAccuracy is 49.5337946284389
Filepath is:abalone.txt
enter 1 for gain, 2 for gini : 2
Accuracy in 1 fold is 44.01
Accuracy in 2 fold is 49.05
Accuracy in 3 fold is 47.28
Accuracy in 4 fold is 44.74
Accuracy in 5 fold is 46.64
Accuracy in 6 fold is 44.19
Accuracy in 7 fold is 45.51
Accuracy in 8 fold is 51.0
Accuracy in 9 fold is 49.15
Accuracy in 10 fold is 45.7
totalAccuracy is 46.7271426802899
```

Accuracy in 4 fold is 28.57