

## 3-Fold Cross Validation Report

### I. Full Bayes:

#### 1) Confusion Matrix for 3-Folds:

```
#####
CONFUSION MATRIX FOLD_ONE
#####
Predicted      Iris-setosa  Iris-versicolor  Iris-virginica
Actual
Iris-setosa      16           0           0
Iris-versicolor   0          17           1
Iris-virginica    0           0          16

#####
CONFUSION MATRIX FOLD_TWO
#####
Predicted      Iris-setosa  Iris-versicolor  Iris-virginica
Actual
Iris-setosa      16           0           0
Iris-versicolor   0          15           3
Iris-virginica    0           1          15

#####
CONFUSION MATRIX FOLD_THREE
#####
Predicted      Iris-setosa  Iris-versicolor  Iris-virginica
Actual
Iris-setosa      18           0           0
Iris-versicolor   0          14           0
Iris-virginica    0           0          18
```

#### 2) Assessment for each class:

Output from console:

```
Class: Iris-versicolor
AVG Accuracy: 0.93
AVG Precision: 0.93
AVG Recall: 0.98
AVG F-Score: 0.95

Class: Iris-setosa
AVG Accuracy: 1.00
AVG Precision: 1.00
AVG Recall: 1.00
AVG F-Score: 1.00

Class: Iris-virginica
AVG Accuracy: 0.98
AVG Precision: 0.98
AVG Recall: 0.92
AVG F-Score: 0.95
```

Class	Iris-versicolor	Iris-setosa	Iris-virginica
AVG Accuracy	0.93	1.00	0.98
AVG Precision	0.93	1.00	0.98
AVG Recall	0.98	1.00	0.92
AVG F-Score	0.95	1.00	0.95

## II. Naïve Bayes

## 1) Confusion Matrix for 3-Folds:

```
#####
CONFUSION MATRIX FOLD_ONE (Naive)
#####
Predicted      Iris-setosa  Iris-versicolor  Iris-virginica
Actual
Iris-setosa      16           0           0
Iris-versicolor   0          16           2
Iris-virginica    0           1          15

#####
CONFUSION MATRIX FOLD_TWO (Naive)
#####
Predicted      Iris-setosa  Iris-versicolor  Iris-virginica
Actual
Iris-setosa      16           0           0
Iris-versicolor   0          17           1
Iris-virginica    0           2          14

#####
CONFUSION MATRIX FOLD_THREE (Naive)
#####
Predicted      Iris-setosa  Iris-versicolor  Iris-virginica
Actual
Iris-setosa      18           0           0
Iris-versicolor   0          14           0
Iris-virginica    0           0          18
```

## 2) Assessment for each class:

Output from console:

```
Class: Iris-versicolor
AVG Accuracy: 0.94
AVG Precision: 0.94
AVG Recall: 0.95
AVG F-Score: 0.94

Class: Iris-virginica
AVG Accuracy: 0.94
AVG Precision: 0.94
AVG Recall: 0.94
AVG F-Score: 0.94

Class: Iris-setosa
AVG Accuracy: 1.00
AVG Precision: 1.00
AVG Recall: 1.00
AVG F-Score: 1.00
```

Class	Iris-versicolor	Iris-setosa	Iris-virginica
AVG Accuracy	0.94	1.00	0.94
AVG Precision	0.94	1.00	0.94
AVG Recall	0.95	1.00	0.94
AVG F-Score	0.94	1.00	0.94