Decision Tree:

max_depth=119, min_samples_leaf=3 , min_samples_split= 5

F-Score: 0.9370629370629371

Recall: 0.9436619718309859

Precision: 0.9305555555555556

Accuracy: 0.9210526315789473

Confusion Matrix:

 [[38 5]

 [4 67]]

max_depth=30, min_samples_leaf=9 , min_samples_split= 2

F-Score: 0.9583333333333334

Recall: 0.971830985915493

Precision: 0.9452054794520548

Accuracy: 0.9473684210526315

Confusion Matrix:

 [[39 4]

 [2 69]]

max_leaf_nodes=9,max_depth=100

F-Score: 0.9436619718309859

Recall: 0.9436619718309859

Precision: 0.9436619718309859

Accuracy: 0.9298245614035088

Confusion Matrix:

 [[39 4]

 [4 67]]

max_leaf_nodes=9,min_samples_split=7,max_depth=100

F-Score: 0.935251798561151

Recall: 0.9154929577464789

Precision: 0.9558823529411765

Accuracy: 0.9210526315789473

Confusion Matrix:

 [[40 3]

 [6 65]]

min_samples_leaf=3,max_depth=4,max_features=8

F-Score: 0.9523809523809523

Recall: 0.9859154929577465

Precision: 0.9210526315789473

Accuracy: 0.9385964912280702

Confusion Matrix:

 [[37 6]

 [1 70]]

Random Forest:

min_samples_leaf=300, max_leaf_nodes=5, warm_start=False

F-Score: 0.7675675675675676

Recall: 1.0

Precision: 0.6228070175438597

Accuracy: 0.6228070175438597

Confusion Matrix:

 [[0 43]

 [0 71]]

min_samples_leaf=5,max_samples=3, warm_start=True

F-Score: 0.7675675675675676

Recall: 1.0

Precision: 0.6228070175438597

Accuracy: 0.6228070175438597

Confusion Matrix:

 [[0 43]

 [0 71]]

min_samples_split=2,min_samples_leaf=1

F-Score: 0.9722222222222222

Recall: 0.9859154929577465

Precision: 0.958904109589041

Accuracy: 0.9649122807017544

Confusion Matrix:

 [[40 3]

 [1 70]]

max_depth=4 , max_leaf_nodes=6

F-Score: 0.9722222222222222

Recall: 0.9859154929577465

Precision: 0.958904109589041

Accuracy: 0.9649122807017544

Confusion Matrix:

 [[40 3]

 [1 70]]

warm_start=True,max_leaf_nodes=102

F-Score: 0.9722222222222222

Recall: 0.9859154929577465

Precision: 0.958904109589041

Accuracy: 0.9649122807017544

Confusion Matrix:

 [[40 3]

 [1 70]]

AdaBoost:

learning_rate=4

F-Score: 0.9411764705882353

Recall: 0.9014084507042254

Precision: 0.9846153846153847

Accuracy: 0.9298245614035088

Confusion Matrix:

 [[42 1]

 [7 64]]

learning_rate=103

F-Score: 0.7090909090909091

Recall: 0.5492957746478874

Precision: 1.0

Accuracy: 0.7192982456140351

Confusion Matrix:

 [[43 0]

 [32 39]]

learning_rate=0.4

F-Score: 0.9722222222222222

Recall: 0.9859154929577465

Precision: 0.958904109589041

Accuracy: 0.9649122807017544

Confusion Matrix:

 [[40 3]

 [1 70]]

learning_rate=612.51

F-Score: 0.9130434782608695

Recall: 0.8873239436619719

Precision: 0.9402985074626866

Accuracy: 0.8947368421052632

Confusion Matrix:

 [[39 4]

 [8 63]]

learning_rate=33.3333334

F-Score: 0.9019607843137255

Recall: 0.971830985915493

Precision: 0.8414634146341463

Accuracy: 0.868421052631579

Confusion Matrix:

 [[30 13]

 [2 69]]