The matrix generated in the output was

[[ 24 0 0 ]

[0 22 2]

[0 1 26]]

6. a) Test set = 75

b) Training set = 75

c) Accuracy = 24 + 22 + 26 / 75 = 0.96

The accuracy value match correctly with the program output.

Iris Setosa:

P = 24 / 24 = 1

R = 24 / 24 = 1

F1 = 2 ( 1 X 1) / 1 + 1 = 1

Iris Versicolor:

P = 22 / 23 = 0.956

R = 22 / 24 = 11 / 12 = 0.916

F1 = 2 ( 22/23 x 11/12 ) / ( 22/23 + 11/12) = 0.936

Iris Virginica:

P = 26 / 28 = 0.928

R = 26 / 27 = 0.962

F1 = 2 ( 13 / 14 X 26 /27 ) / ( 13/14 + 26/27) = 0.945

d) Yes, the values calculated manually and produced by the program for precision are correct.

e) The recall values match with what I have found after calculation.

f) The f1 score also match with the produced outcome.