Dataset is 241 rows and 47 cols

Condition 1:

Linear kernel:

Train_data= 0.3

Accuracy: 0.8611111111111112

 $train_data = 0.4$

[96 rows x 46 columns]

Accuracy: 0.729166666666666

train_data = 0. 2

[48 rows x 46 columns]

Accuracy: 0.6875

train_data = 0.5

[120 rows x 46 columns]

Accuracy: 0.75

train_data = 2.7

[65 rows x 46 columns]

Accuracy: 0.7384615384615385

train_data = 3.7

[89 rows x 46 columns]

Accuracy: 0.797752808988764

kernel SVM

polynomial kernel ::

test_size = 0.375

Accuracy: 0.81111111111111111

test_size = 0.2

Accuracy: 0.8125

test_size = 0.25

Accuracy: 0.7166666666666667

test_size = 0.4

Accuracy: 0.67708333333333334

Guassian kernel ::

Test_size = 0.35

Accuracy: 0.75

test_size = 0.4

Accuracy: 0.7083333333333334

test_size = 0.2

Accuracy: 0.75

test_size = 0.45

Accuracy: 0.7314814814814815

sigmoid kernel:

test_size = 0.45

Accuracy: 0.7592592592592593

Accuracy: 0.75

test_size = 0.15