For train-test ratio 60:40

accuracy_score for reg_val 0.1 : 0.9333333333333333

f1_score for reg_val 0.1 : 0.9332345679012346

confusion_matrix for reg_val 0.1 : [[19 0 0]

[0 11 2]

[0 1 12]]

accuracy_score for reg_val 1 : 1.0

f1_score for reg_val 1 : 1.0

confusion_matrix for reg_val 1 : [[19 0 0]

[0 13 0]

[0 0 13]]

accuracy_score for reg_val 10 : 0.9777777777777777

f1_score for reg_val 10 : 0.9777448559670783

confusion_matrix for reg_val 10 : [[19 0 0]

[0 12 1]

[0 0 13]]

For train-test ratio 60:40

accuracy_score : 0.9666666666666667

f1_score : 0.9666666666666667

confusion_matrix : [[23 0 0]

[0 18 1]

[0 1 17]]

For train-test ratio 80:20

accuracy_score : 0.9666666666666667

f1_score : 0.9664109121909632

confusion_matrix : [[10 0 0]

[0 8 1]

[0 0 11]]