

#### 4 (a). Performance on test-set with alpha = 0.1

Test-accuracy = 0.9856502242152466

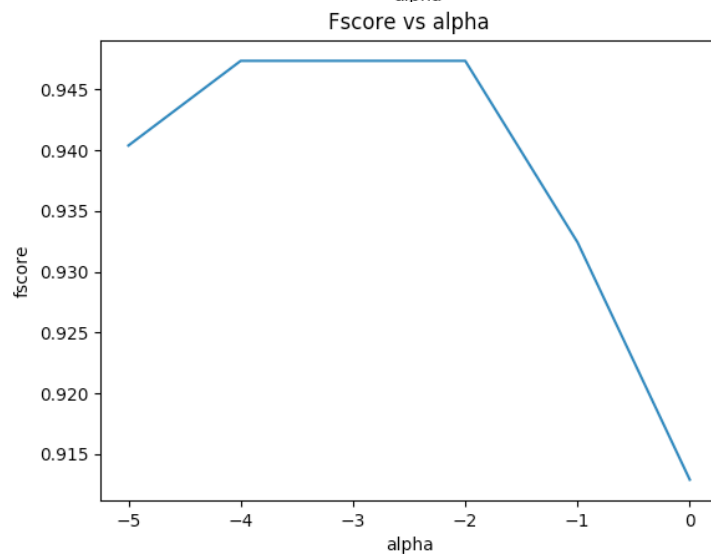
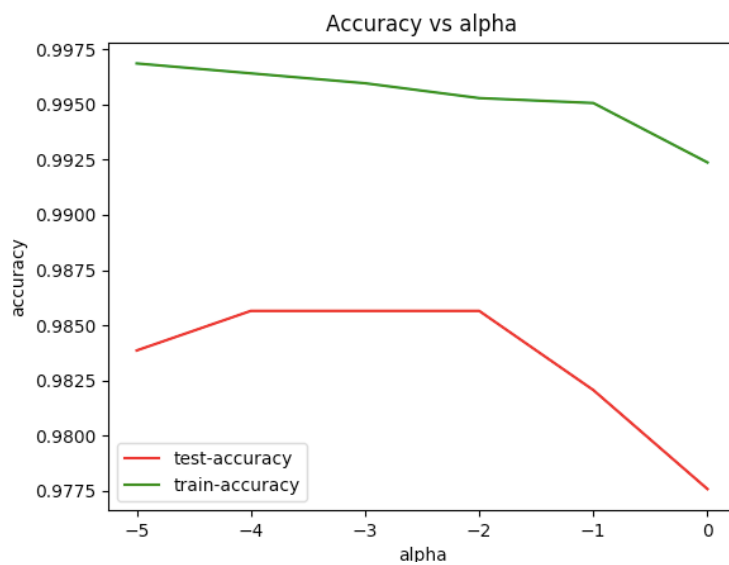
Precision = 0.9411764705882353

Recall = 0.9536423841059603

F-score = 0.9473684210526316

		True condition	
		Positive	Negative
Predicted condition	Positive	True Positive [144]	False Positive [9]
	Negative	False Negative [7]	True Negative [955]

#### 4(b). -----PLOTS-----



As alpha increases, train-accuracy goes down more and more but the test accuracy first increases, then goes down because of overfitting.

F-score metric also first increases and then decreases.