

# LAB 10

## LAB REPORT

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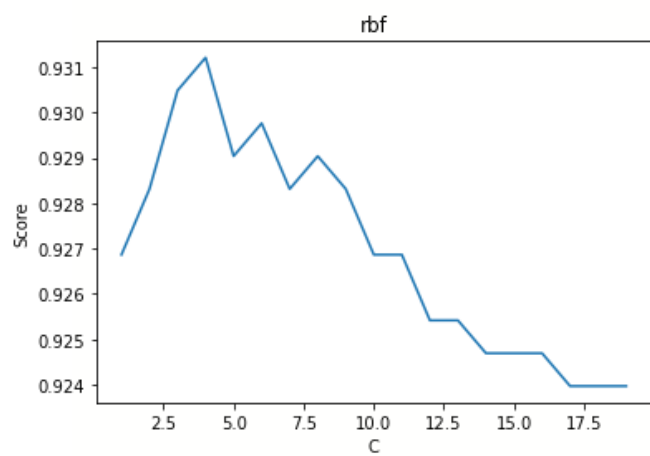
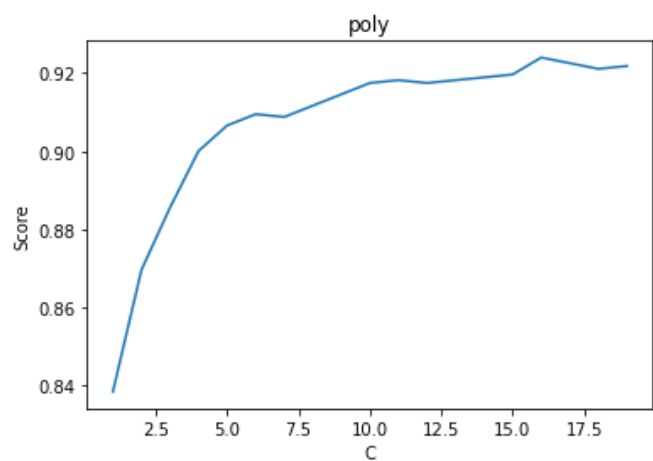
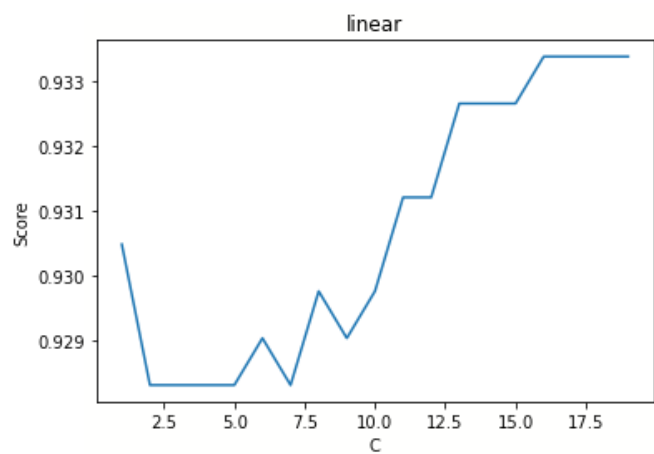
### QUESTION 1.

1)

- SVC package from the sklearn decomposition classes was used.
- A one-to-one system is used to manage multiclass support.
- C, kernel, degree, gamma, coef0, and max iter are some of the parameters it allows, but only C, kernel and degree are in use.
- This package also includes attributes such as class weight, classes, coefficients, and the number of features, among others.

2)

- Read the data file
- Scaled and Splitted the dataset into test and train with 70% as train.
- Made SVC object models with C varying from 1 to 20 for each of the kernel types.
- Plotted test and train accuracies against C values for each of the kernel type



	Optimum C	Test Acc
Linear	15	0.933382
Quadratic	15	0.923968
RBF	3	0.931209