**Practical – 8**

Aim – Implementation of SVM Algorithm

**Code**

from sklearn.datasets import load\_breast\_cancer import matplotlib.pyplot as plt

from sklearn.inspection import DecisionBoundaryDisplay from sklearn.svm import SVC

cancer = load\_breast\_cancer()

X = cancer.data[:, :2]

y = cancer.target

svm = SVC(kernel="rbf", gamma=0.5, C=1.0)

svm.fit(X, y)

DecisionBoundaryDisplay.from\_estimator( svm, X, response\_method="predict", cmap=plt.cm.Spectral, alpha=0.8, xlabel=cancer.feature\_names[0], ylabel=cancer.feature\_names[1], )

plt.scatter(X[:, 0], X[:, 1],

c=y,

s=20, edgecolors="k")

plt.show()

**Output**

