

## TASK 10

### Accuracies For Each Model:

S. No	Model Name	Accuracies
1	Logistic Regression	0.837398
2	Decision Tree	0.666667
3	Random Forest	0.788618
4	KNN	0.780488
5	SVM	0.821138
6	Naive Bayes	0.821138

### Accuracy Of the Best Model:

S. No	Model Name	Accuracies
1	Logistic Regression	0.837398

### Accuracies For Each Model with GridSearchCV:

S. No	Model Name	Accuracies	Hyperparameters
1	Logistic Regression	0.837398	{'C': 0.1, 'solver': 'lbfgs'}
2	Decision Tree	0.829268	{'criterion': 'gini', 'max_depth': 1, 'min_samples_split': 2}
3	Random Forest	0.829268	{'criterion': 'entropy', 'max_depth': 5, 'n_estimators': 1000}
4	KNN	0.796748	{'leaf_size': 10, 'n_neighbors': 9}
5	SVM	0.829268	{'C': 0.1, 'kernel': 'linear'}
6	Naive Bayes	0.837398	{'var_smoothing': 1.0}

### Accuracy Of the Best Model with GridSearchCV:

S. No	Model Name	Accuracies	Hyperparameters
1	Logistic Regression	0.837398	{'C': 0.1, 'solver': 'lbfgs'}
2	Naive Bayes	0.837398	{'var_smoothing': 1.0}