Solution:-

1. The Problem Statement is Based Upon:
    a) **Domain – Machine Learning**
    b) **Supervised Learning**
    c) **Classification Type**
2. Information of Dataset:
    a) **Rows – 399**
    b) **Columns – 28**
3. Pre-Procession Methods:
    a) **get_dummies – for converting to numerical data**
    b) **Standard Scalar() – For Optimization for getting better results**
4. Final Model Selection:

    Answer: Logistic Regression

    Reason:-

    a) **Accuracy, F1-Weigted, roc_auc – Values are high when compared with other algorithms.**

S.No	Algorithm	Accuracy	P-0	P-1	R-0	R-1	F1-0	F1-1	Macro.Avg -P	Macro.Avg -R	Macro.Avg -F1	W.Avg -P	W.Avg -R	W.Avg-F1	roc_auc
1.	SVM	0.98	0.96	1	1	0.97	0.98	0.99	0.98	0.99	0.98	0.98	0.98	0.98	0.99
2.	D-T	0.95	0.93	0.96	0.93	0.96	0.93	0.96	0.95	0.95	0.95	0.95	0.95	0.95	0.94
3.	R-F	0.99	0.98	1	1	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
4.	LR	0.99	0.98	1	1	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	1
5.	KNN	0.95	0.88	1	1	0.92	0.94	0.96	0.94	0.96	0.95	0.96	0.95	0.95	0.99
6.	Gaussian-NB	0.97	0.94	1	1	0.96	0.97	0.98	0.97	0.98	0.97	0.98	0.97	0.98	1
7.	Bernoulli-NB	0.97	09.4	1	1	0.960.97	0.98		0.97	0.98	0.97	0.98	0.97	0.98	1
8.	Multinomial-NB	Value Error- Negative values													
9.	Complement-NB	Value Error- Negative values													
10.	Categorical-NB	Value Error- Negative values													