Multiple Linear Regression :

- ☐ A linear regression model that aims to find the relationship between multiple input features and a continuous output variable.

S.No	Standard Scaler	Accuracy
1	No	71 %
2	Yes	79 %

Support Vector Machine Regression :

- ☐ A regression algorithm that aims to find the optimal hyperplane in a high-dimensional space to predict continuous target values.

S.No	Kernel	Degree	C	Epsilon	Accuracy
1	linear	3	1000	0.1	71 %
2	linear	3	10000	0.01	70 %
3	rbf	3	10000	1e-3	88 %
4	rbf	3	10000	1000	89 %

Decision Tree :

- ☐ A tree-based model that partitions the feature space into segments, making decisions based on hierarchical if-then-else rules.

S.No	criterion	Splitter	Maximum Depth	max_leaf_nodes	Accuracy
1	poison	best	5	-	89 %
2	friedman_mse	random	-	-	78 %
3	friedman_mse	best	5	-	84 %
4	poison	best	5	7	88 %
5	poison	best	10	7	88 %

Random Forest :

- ☐ An ensemble method that combines multiple decision trees to improve accuracy and reduce overfitting.

S.No	n_estimators	criterion	maximum_depth	min_sample_split	min_sample_leaf	Accuracy
1	100	poison	7	5	-	89 %
2	90	friedman_mse	7	5	-	89.1 %
3	95	friedman_mse	5	5	3	91 %
4	500	squared_error	9	9	-	90 %