PREDICTION ACCURACY

MULTI LINEAR PROGRESSION:

ACCURACY:78%

SUPPORT VECTOR MACHINE:

C	Kernel	Degree	Gamma	R_Score
0.1	linear	3	scale	-0.11
0.1	poly	3	Scale	-0.08
0.01	rbf	3	Scale	-0.08
0.1	sigmoid	3	Scale	-0.08
0.1	linear	3	Auto	-0.12
1000	rbf	3	Scale	-0.11
10000	linear	3	Scale	0.74
100	rbf	3	Scale	-0.12
100	linear	3	Scale	0.54

DECISION TREE:

Model	Criterion	Splitter	R_score
1	squared_error	Best	0.68631
2	friedman_mse	best	0.70147
3	absolute_error	Best	0.64898
4	poisson	Best	0.71474
5	squared_error	Random	0.68040
6	friedman_mse	Random	0.71772
7	absolute_error	random	0.71388
8	poisson	Random	0.77924

RANDOM FOREST:

N_estimators	Random state	Criterion	R_Score
50	0	Squared error	84%
50	0	absolute_error	85%
50	0	friedman_mse	85%
50	0	poisson	84%
100	0	poisson	85%
100	0	absolute_error	85%

Conclusion:

Thus the random forest algorithm gives better accuracy compared to SVM ,Multi Linear and Decision Tree.