Multilinear Regression:

R2 value for Multilinear regression: **0.78947 (Poor Model)**

SVM Regression:

kernel	Hyper parameter	rbf(r2 value)	linear (r2 value)	poly (r2 value)	sigmoid(r2 value)
1	C=10	-0.0819	-0.0016	-0.0931	-0.0907
2	C=100	-0.1248	0.5432	-0.0997	-0.1181
3	C=500	-0.1246	0.6270	-0.0820	-0.4562
4	C=1000	-0.1174	0.6340	-0.0555	-1.6659
5	C=2000	-0.1077	0.6893	-0.0027	-5.6164
6	C=3000	-0.0962	0.7590	0.0489	-12.019

SVM with Standardisation:

kernel	Hyper parameter	rbf(r2 value)	linear (r2 value)	poly (r2 value)	sigmoid(r2 value)
1	C=10	-0.0322	0.4624	0.0387	0.0393
2	C=100	0.3200	0.6288	0.6179	0.5276
3	C=500	0.6642	0.7631	0.8263	0.4446
4	C=1000	0.8102	0.7649	0.8566	0.2874
5	C=2000	0.8547	0.7440	0.8605	-0.5939
6	C=3000	0.8663	0.7414	0.8598	-2.1244

DECISION TREE Regression

Without any parameter r2 value for Decision Tree: **0.7000**

	criterion	splitter	R value
1	squared_error	best	0.6937
2	squared_error	random	0.6710
3	friedman_mse	best	0.6542
4	friedman_mse	random	0.6235
5	absolute_error	best	0.6671
6	absolute_error	random	0.7068
7	poisson	best	0.7158
8	poisson	random	0.7223

RandomForestRegressor

Without any parameter r2 value forRandomForest Regressor : **0.8505**

	criterion	n_estimators	R value
1	squared_error	50	0.8498
2	squared_error	100	0.8538
3	friedman_mse	50	0.8500
4	friedman_mse	100	0.8540
5	absolute_error	50	0.8526
6	absolute_error	100	0.8520
7	poisson	50	0.8491
8	poisson	100	0.8526

Final verdict: None of the model r2 value not more than 0.86, So currently saved SVM