1.MULTIPLE LINEAR REGRESSION (R^2 value)=0.7894)

2.SUPPORT VECTOR MACHINE:

S.NO	HYPER PARAMETER	LINEAR (r value)	RBF (NON-LINER) (r value)	POLY (r value)	SIGMOID (r value)
1	C10	0.4624	-0.0324	0.0387	0.0393
2	C100	0.6288	0.4790	0.6179	0.3276
3	C500	0.7631	0.6642	0.8263	0.4446
4	C2000	0.7414	0.8554	0.8605	-0.5939
5	C3000	0.7414	0.8663	0.8598	-2.1254

The SVM REGRESSION use R^2 value (nonlinear (RBF) and hyper parameter (c=3000)=0.8663

RANDOM FOREST:

S.NO	**Hyper prameter**	**criterion**	R^2
1.	n_estimators=10	*Absolute error*	0.8509
2.	n_estimators=100	*Absolute error*	0.8526
3.	n_estimators=10	*Friedman mse*	0.8531
4.	n_estimators=100	*Friedman mse*	0.8351
5.	n_estimators=10	*poisson*	0.8170
6.	n_estimators=100	*poisson*	0.8333
7.	max_features	*sqrt*	0.8772
8.	max_features	*Log2*	0.8684

The random forest use R^2 value (max_features=sqrt) and hyper parameter error=0.8772

Random forest is good model giving good result……..