

R² value And Parameters Used:

S.NO	ML Regressor	With split R ² value	Without split R ² value
1	Multi Linear	0.789442	0.7496945
2	SVM	0.866339	0.866339
3	Decision Tree	0.69733317	0.9986671
4	Random Forest	0.867752	0.969052

Parameters	Multiple Linear	With split R ² value	'C': 3000, 'gamma': 'scale', 'kernel': 'rbf'
		Without Split R ² value	'C': 1000, 'gamma': 'scale', 'kernel': 'linear'
	SVM	With split R ² value	criterion': 'friedman_mse', 'max_features': None, 'splitter': 'best'
		Without Split R ² value	criterion': 'friedman_mse', 'max_features': 'sqrt', 'splitter': 'best'
	Random Forest	With split R ² value	criterion': 'poisson', 'max_features': 'sqrt', 'n_estimators': 100, 'random_state': 0
		Without Split R ² value	'criterion': 'absolute_error', 'max_features': 'sqrt', 'n_estimators': 100, 'random_state': 0
	Decision Tree	With split R ² value	'criterion': 'friedman_mse', 'max_features': None, 'splitter': 'best'}
		Without Split R ² value	'criterion': 'friedman_mse', 'max_features': 'sqrt', 'splitter': 'best'

Finalised Model:

Decision Tree Regressor - Without data splits , R² value is 0.9986671

Used Parameters: 'criterion': 'friedman_mse', 'max_features': 'sqrt', 'splitter': 'best'

