

To find r2 values through Regression methods in the Machine Learning

1. MULTIPLE LINEAR REGRESSION - **R2 value = 0.9358680970046241**

2. SUPPORT VECTOR MACHINE - SVM:

#	Hyper Parameter	R2 - Value			
		Linear	RBF (Non-Linear)	POLY	SIGMOID
01	Default	-0.05569157	-0.057418394	-0.057103875	-0.057209359
02	C10	-0.039644947	-0.056807593	-0.053667205	-0.054719583
03	C100	0.106468196	-0.050726023	-0.019802139	-0.030453515
04	C500	0.592897727	-0.024323348	0.114684807	0.070572145
05	C1000	0.780283988	0.006768344	0.266163709	0.18506862
06	C2000	0.876772169	0.067515543	0.481002816	0.397065287
07	C3000	0.895674469	0.123227566	0.637006422	0.591363021

3. **Decision Tree : DecisionTreeRegressor()** without parameter: **0.9169384929067015**

#	Criterion	Max_Feaitres	Splitter	R2 Values
01	mse	auto	best	0.908731067
02	mse	auto	random	0.659402711
03	mse	sqrt	best	0.421828403
04	mse	sqrt	random	0.705507523
05	mse	log2	best	0.421828403
06	mse	log2	random	0.705507523
07	mae	auto	best	0.932961915
08	mae	auto	random	0.727554308
09	mae	sqrt	best	0.603292997
10	mae	sqrt	random	-1.181389256
11	mae	log2	best	0.603292997
12	mae	log2	random	-1.181389256
13	friedman_mse	auto	best	0.893010665
14	friedman_mse	auto	random	0.659402711
15	friedman_mse	sqrt	best	0.887781739
16	friedman_mse	sqrt	random	0.411949757
17	friedman_mse	log2	best	0.736546269
18	friedman_mse	log2	random	0.821682218