ASSIGNMENT

Support Vector Machine:

S.No	Hyper Parameter	Linear R2-Value	RBF R2-Value	Poly R2-Value	Sigmoid R2-Value
1	C10	-0.039	-0.05	-0.05	-0.05
2	C100	0.10	-0.050	-0.019	-0.03
3	C500	0.59	-0.02	0.112	0.07
4	C1000	0.78	-0.006	0.265	0.18
5	C2000	0.87	0.06	0.483	0.39
6	C3000	0.89	0.12	0.63	0.59

The SVM Regression uses R-value (C=3000) =0.89.

Decision Tree:

S.No:	Criterion	Splitter	R2-Value
1	Squared_error	Best	0.89
2	Squared_error	Random	0.95
3	Friedman_mse	Best	0.89
4	Friedman_mse	Random	0.85
5	Absolute_error	Best	0.93
6	Absolute_error	Random	0.71
7	Poisson	Best	0.65
8	Poisson	Random	0.39

The Decision Tree Regression uses R2-value (Squared_error and Random) =0.95.