To find the following machine learning regression method using R^2 value

1. MULTIPLE LINEAR REGRESSION (R^2 value) = 0.9359

2. SUPPORT VECTOR MACHINE:

S.NO	HYPER PARAMETER	LINEAR (r^2 value)	RBF (NON LINEAR) (r^2 value)	POLY (r^2 value)	SIGMOID (r^2 value)
1	C10	-0.0396	-0.0568	-0.0537	-0.0547
2	C100	0.1065	-0.0507	-0.0198	-0.0305
3	C500	0.5929	-0.0243	0.1147	0.0706
4	C1000	0.7803	0.0068	0.2661	0.1850
5	C2000	0.8768	0.0675	0.4810	0.3971
6	C3000	0.8957	0.1232	0.6370	0.5914

The SVM Regression use R^2 value (linear and hyper parameter (C3000)) = 0.8957

3. DECISION TREE:

S. NO	CRITERION	MAX FEATURES	SPLITTER	R^2 VALUE
1	mse	auto	best	0.9278
2	mse	auto	random	0.9276
3	mse	sqrt	best	0.9300
4	mse	sqrt	random	0.2714
5	mse	log2	best	0.8415
6	mse	log2	random	0.8605
7	mae	auto	best	0.9542
8	mae	auto	random	0.7367
9	mae	sqrt	best	-0.3646
10	mae	sqrt	random	-0.3061
11	mae	log2	best	0.4554
12	mae	log2	random	0.7889
13	friedman_mse	auto	best	0.9103
14	friedman_mse	auto	random	0.9010
15	friedman_mse	sqrt	best	-0.3431
16	friedman_mse	sqrt	random	0.5747
17	friedman_mse	log2	best	0.6881
18	friedman_mse	log2	random	-0.4253

The Decision Tree Regression use R^2 value (mae, auto, best) = 0.9542