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To find out the best model performance by r score value

1. Multiple linear Regression

r_score value will be 0.935

2. Support Vector Machine

S.NO	Hyper	Linear	Rbf	Poly	Sigmoid
	Tuning parameter C	(r_score)	(r_score)	(r_score)	(r_score)
					0.075
1.	0.01	-0.057	-0.057	-0.057	-0.057
2.	0.1	-0.057	-0.057	-0.057	-0.057
3.	10	-0.039	-0.056	-0.053	-0.054
4.	100	0.106	-0.050	-0.019	-0.030
5.	1000	0.780	0.067	0.266	0.185
6.	2000	0.876	0.067	0.480	0.397
7.	2500	0.890	0.095	0.566	0.503
8.	3000	0.895	0.123	0.637	0.591
9.	3500	0.896	0.149	0.689	0.621
10.	4000	0.897	0.172	0.732	0.628
11.	4500	0.897	0.190	0.767	0.645
12.	5000	0.900	0.212	0.793	0.730

500 500 500 500 500 500 500	0.912 0.918 0.918 0.918 0.920 0.922 0.924	0.229 0.245 0.261 0.278 0.296 0.315 0.333 0.348	0.812 0.822 0.826 0.829 0.829 0.828 0.826	0.746 0.797 0.811 0.825 0.830 0.836
5500 5000 5000 5000 5000	0.918 0.918 0.918 0.920 0.922 0.924	0.261 0.278 0.296 0.315 0.333	0.826 0.829 0.829 0.828	0.811 0.825 0.830 0.836
7000 7500 7500 7500 7000	0.918 0.918 0.920 0.922 0.924	0.278 0.296 0.315 0.333	0.829 0.829 0.828 0.826	0.825 0.830 0.836 0.835
500 5000 5000 5000	0.918 0.920 0.922 0.924	0.296 0.315 0.333	0.829 0.828 0.826	0.830 0.836 0.835
5000 5500 5000	0.920 0.922 0.924	0.315	0.828	0.836
0000	0.922	0.333	0.826	0.835
0000	0.924			
		0.348	0.822	0.044
500		l e e e e e e e e e e e e e e e e e e e		0.841
2500	0.924	0.359	0.818	0.838
0000	0.924	0.371	0.812	0.853
0000	0.930	0.533	0.671	0.901
.0000	0.930	0.629	0.601	0.754
0000	0.930	0.666	0.588	0.080
60000	0.931	0.681	0.559	-0.424
0000	0.931	0.687	0.509	-0.615
20000	0.931	0.693	0.454	-0.121
	0.931	0.700	0.426	-0.448
0000			0.400	-0.843
	0000	0000 0.931	0000 0.931 0.693 0000 0.931 0.700	0000 0.931 0.693 0.454

From these table,

C=100000 & kernel="linear" gives r_score=0.931 which will be the best among other values.

3. Decision Tree

CRETERION	SPLITTER	MAX_FEATURE	R_SCORE
		S	
squared_error	best	sqrt	0.676
squared_error	random	sqrt	-0.002
friedman_mse	best	sqrt	0.749
friedman_mse	random	sqrt	-0.039
poisson	best	sqrt	0.041
poisson	random	sqrt	0.312
squared error	best	log2	0.893

squared_error	best	log2	0.893
squared_error	random	log2	0.417
friedman_mse	best	log2	0.463
friedman_mse	random	log2	0.401
poisson	best	log2	0.701
poisson	random	log2	-0.400

From these table,

Criterion="squared_error", splitter="best", max_features="log2", r_score=0.893 will be the best value among other values.