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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	(r_score)	(r_score)	(r_score)	(r_score)
	parameter				
	C				
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	0.010	0.020
4.	100	0.106	-0.050	-0.019	-0.030
5.	1000	0.780	0.067	0.266	0.185
<i>J</i> .	1000	0.760	0.007	0.200	0.103

From these table,

C=1000 & kernel="linear" gives r_score=0.780 which will be the best among other values.

3. Decision Tree

CRETERION	SPLITTER	R_SCORE
squared_error	best	0.92
squared_error	random	0.85
friedman_mse	best	0.89

friedman_mse	random	0.64
poisson	best	0.90
poisson	random	0.79

From these table,

Criterion='squared_error', splitter='best' will give the best r_score value= 0.92