HOPE AI ASSIGNMENT
Comparison of R-Square values

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1. Simple Linear Regression(SSR) → R-Square value: 0.9817404960196033
2. Multiple Linear Regression(MLR) → R-Square value: 0.9347068473282424
3. Support Vector Machine (SVM) → R-Square value: 0.7849121652938659

S.No	C	kernel			
	Hyper Parameter	Linear	Radial Bias function (RBF) - Non linear	Poly	Sigmoid
1	0.1	-0.1596	-0.1598	-0.1598	-0.1598
2	1.0	-0.1572	-0.1597	-0.1593	-0.1594
3	10	-0.1336	-0.1586	-0.1544	-0.1557
4	100	0.0548	-0.1479	-0.1074	-0.1195
5	1000	0.7849	-0.0627	0.2680	0.1496

4. Decision Tree (DT) → R-Square value:

S.No	Criterion	Max_Features	Splitter	R-Square value
1	squared_error	none	best	0.9722
2			random	0.9381
3		auto	best	0.9614
4			random	0.9549
5		sqrt	best	0.7954
6			random	0.7662
7		log2	best	0.8985
8			random	0.7678
9	friedman_mse	none	best	0.9600
10			random	0.9221
11		auto	best	0.9762
12			random	0.9121

13		sqrt	best	0.7148
14			random	0.7927
15		log2	best	0.8541
16			random	0.8490
17	absolute_error	none	best	0.9583
18			random	0.9554
19		auto	best	0.9477
20			random	0.9436
21		sqrt	best	0.5128
22			random	0.5989
23		log2	best	0.9249
24			random	0.5730
25	poisson	none	best	0.9481
26			random	0.9683
27		auto	best	0.9444
28			random	0.9279
29		sqrt	best	0.6836
30			random	0.7582
31		log2	best	0.5083
32			random	0.9237