To find following the machine learning regression method using in r2 value

Multiple Linear Regression:

R2 value: 0.7894790349867009

Support Vector Machine:

Hyper Parameter	Linear (r value)	RBF (NON LINEAR) (r value)	POLY (r value)	SIGMOID (r value)
C10	0.462468414233968	-0.03227329390671052	0.038716222760231456	0.03930714378274347
C100	0.6288792857320346	0.3200317832050832	0.6179569624059795	0.5276103546510407
C500	0.7631057975975393	0.6642984645143137	0.8263683541268934	0.44460610338694795
C1000	0.7649311738649672	0.8102064851758545	0.8566487675946524	0.28747069486978516
C1500	0.7440487080982905	0.8427494701978235	0.8580889211562686	-0.06744112500716382
C2000	0.7440418308107866	0.854776642539298	0.860557928865969	-0.5939509731283508
C3000	0.7414236599248631	==0.8663393953081686==	0.8598930084494358	-2.1244194786689863

Decision Tree

No	CRITERION	SPLITTER	MAX FEATURES	R VALUE
1	squared_error	Best	Sqrt	0.7304275213183836
2	squared_error	Random	Sqrt	0.7045493394573541
3	squared_error	Best	Log2	0.6960452317124439
4	squared_error	Random	Log2	0.7287209056740023
5	squared_error	Best	None	0.7300613818699182
6	squared_error	random	None	0.7209408801405768
7	friedman_mse	Best	Sqrt	0.7002606314979025
8	friedman_mse	Random	Sqrt	0.6651239025650819
9	friedman_mse	Best	Log2	0.704450536546119
10	friedman_mse	Random	Log2	0.7216578813305338
11	friedman_mse	Best	None	0.7306632458144676
12	friedman_mse	Random	None	0.7226076851495364
13	absolute_error	Best	Sqrt	0.6996688282460393
14	absolute_error	Random	Sqrt	0.6726554796535373
15	absolute_error	Best	Log2	0.7205577192254702
16	absolute_error	Random	Log2	0.6920500725802841
17	absolute_error	Best	None	0.7139233210656045
18	absolute_error	Random	None	0.7374643598233536
19	poisson	Best	Sqrt	0.4958275379209969
20	poisson	Random	Sqrt	0.6737218629045889
21	poisson	Best	Log2	0.6794969091733786
22	poisson	Random	Log2	0.7144451697711103
23	poisson	Best	None	0.747166745095021
24	poisson	Random	None	0.7066731783283752

Random Forest

Sno	N_ESTIMATORS	CRITERION	MAXFEATURES	R2 VALUE
1	50	squared_error	Sqrt	0.8701028385180851
2	100	squared_error	Sqrt	0.8718001587457894
3	50	squared_error	log2	0.8681996057614894
4	100	squared_error	log2	0.8695327331318028
5	50	squared_error	None	0.852554550341361
6	100	squared_error	None	0.8554279128535067
7	50	absolute_error	Sqrt	0.8658715988246394
8	100	absolute_error	Sqrt	0.8716449460920973
9	50	absolute_error	log2	0.8697756502668389
10	100	absolute_error	log2	0.8719872939568064
11	50	absolute_error	None	0.849152753559274
12	100	absolute_error	None	0.8545582387239524
13	50	friedman_mse	Sqrt	0.8688820744852159
14	100	friedman_mse	Sqrt	0.8713481734076576
15	50	friedman_mse	log2	0.8622413870992105
16	100	friedman_mse	log2	0.8700619856800212
17	50	friedman_mse	None	0.8465958994853551
18	100	friedman_mse	None	0.8592750560471338
19	50	Poisson	Sqrt	0.8705070945780351
20	100	Poisson	Sqrt	0.8711288410480799
21	50	Poisson	log2	0.8638015283716634
22	100	Poisson	log2	0.869178851414411
23	50	Poisson	None	0.8522570024085658
24	100	Poisson	None	0.848362395429203