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

Support Vector Machine:

Hyper Parameter	Linear (r value)	RBF (NON LINEAR) (r value)	POLY (r value)	SIGMOID (r value)
C10	0.003250721816758894 7	-0.018572854398117844	-0.013548290924396467	-0.01585073125893799
C100	0.18028594222761862	-0.009364909092804297	0.03790719343785909	0.014082351620280265
C500	0.6909091503857931	0.025757743142911016	0.23767422870647104	0.1342409861378877
C1000	0.8768358457857834	0.06707569875923425	0.42979860216196086	0.2674555916309973
C1500	0.9041338590804145	0.1055210325107564	0.5629277708689762	0.387412070235864
C2000	0.9134824554472242	0.14252592069486747	0.6413547699851418	0.46749717430163684
C3000	0.9327761918507149	0.22222282761729706	0.7002573051859722	0.6333540203707144

Decision Tree

No	CRITERION	SPLITTER	MAX FEATURES	R VALUE
1	***squared_error***	Best	Sqrt	0.41713807065726927
2	***squared_error***	Random	Sqrt	0.5378683141424356
3	***squared_error***	Best	Log2	0.44375725770296937
4	***squared_error***	Random	Log2	0.32365754076989595
5	***squared_error***	Best	None	0.9171934785006532
6	***squared_error***	random	None	0.88246217858511
7	***friedman_mse***	Best	Sqrt	-0.08501122775635794
8	***friedman_mse***	Random	Sqrt	0.9094242396272857
9	***friedman_mse***	Best	Log2	0.6411966371650364
10	***friedman_mse***	Random	Log2	-1.2792108979087722
11	***friedman_mse***	Best	None	0.903916279595469
12	***friedman_mse***	Random	None	0.8467815844794676
13	***absolute_error***	Best	Sqrt	-0.3828296475783117
14	***absolute_error***	Random	Sqrt	0.13344162875684007
15	***absolute_error***	Best	Log2	-0.17587753433751407
16	***absolute_error***	Random	Log2	0.5883505235925216
17	***absolute_error***	Best	None	0.9360732650792688
18	***absolute_error***	Random	None	0.939029662239798
19	***poisson***	Best	Sqrt	0.9186756733201573
20	***poisson***	Random	Sqrt	0.46691972356273215
21	***poisson***	Best	Log2	0.042321479503550474
22	***poisson***	Random	Log2	0.7801334262917681
23	***poisson***	Best	None	0.9431091862476945
24	***poisson***	Random	None	0.7901975452786448

Random Forest

Sno	N_ESTIMATORS	CRITERION	MAXFEATURES	R2 VALUE
1	50	***squared_error***	***Sqrt***	0.613507251212222
2	100	***squared_error***	***Sqrt***	0.6542182765527815
3	50	***squared_error***	***log2***	0.7411171186335046
4	100	***squared_error***	***log2***	0.6581541160609805
5	50	***squared_error***	***None***	0.9273337325000344
6	100	***squared_error***	***None***	0.931867564517127
7	50	***absolute_error***	***Sqrt***	0.5623380451906549
8	100	***absolute_error***	***Sqrt***	0.671127960163293
9	50	***absolute_error***	***log2***	0.364164723638725
10	100	***absolute_error***	***log2***	0.7024560867970556
11	50	***absolute_error***	***None***	0.9351046367368752
12	100	***absolute_error***	***None***	0.937206661452639
13	50	***friedman_mse***	***Sqrt***	0.5887472438817573
14	100	***friedman_mse***	***Sqrt***	0.676496423890452
15	50	***friedman_mse***	***log2***	0.6373281492294232
16	100	***friedman_mse***	***log2***	0.7478969127755715
17	50	***friedman_mse***	***None***	0.9412871586582846
18	100	***friedman_mse***	***None***	0.9213152930405965
19	50	***Poisson***	***Sqrt***	0.5857417358275465
20	100	***Poisson***	***Sqrt***	0.636918295022046
21	50	***Poisson***	***log2***	0.47747194551406213
22	100	***Poisson***	***log2***	0.5654168179265978
23	50	***Poisson***	***None***	0.9363080813745691
24	100	***Poisson***	***None***	0.9203362538119148