

MLR	Multiple Linear Regression
SVM	Support Vector Model
DT	Decision Tree
RF	Random Forest

Sr.No.	Algorithm	Dataset	Standardisation	C Parameter	Playable Parameter	R_Score
1	SVM	50_Startups.csv	Yes	100	kernal='linear'	0.1064682
2	SVM	50_Startups.csv	Yes	1000	kernal='linear'	0.780284
3	SVM	50_Startups.csv	Yes	10	kernal='linear'	-0.039645
4	SVM	50_Startups.csv	Yes	10	kernal='rbf'	-0.056808
5	SVM	50_Startups.csv	Yes	100	kernal='rbf'	-0.050726
6	SVM	50_Startups.csv	Yes	1000	kernal='rbf'	0.0067683
7	SVM	50_Startups.csv	Yes	1000	kernal='poly'	0.2661637
8	SVM	50_Startups.csv	Yes	1000	kernal='sigmoid'	0.1850686
9	DT	50_Startups.csv	Yes	1000	criterion='mse'	0.903872
10	DT	50_Startups.csv	No	1000	criterion='mse'	0.8911604
11	DT	50_Startups.csv	Yes	1000	criterion='mse'	0.903872
12	DT	50_Startups.csv	Yes	1000	criterion='mse' splitter = 'random'	0.7422095
13	DT	50_Startups.csv	Yes	1000	criterion='mse' splitter = 'best'	0.9106871
14	DT	50_Startups.csv	Yes	1000	criterion='squared_error' splitter = 'best'	0.9054679
15	DT	50_Startups.csv	Yes	1000	criterion='squared_error' splitter = 'random'	0.8713001
16	DT	50_Startups.csv	Yes	1000	criterion='absolute_error' splitter = 'random'	0.8086667
17	DT	50_Startups.csv	Yes	1000	criterion='absolute_error' splitter = 'best'	0.9612114
18	DT	50_Startups.csv	Yes	1000	criterion='poisson' splitter = 'best'	0.7227056
19	DT	50_Startups.csv	Yes	1000	criterion='poisson' splitter = 'random'	0.6266388
20	DT	50_Startups.csv	Yes	1000	criterion='poisson', splitter = 'random', max_features = 'auto'	0.4098067
21	DT	50_Startups.csv	Yes	1000	criterion='poisson', splitter = 'random', max_features = 'sqrt'	0.3192097

Best Model

22	DT	50_Startups.csv	Yes	1000	criterion='poisson', splitter = 'random', max_features = 'log2'	-0.368052
23	DT	50_Startups.csv	Yes	1000	criterion='poisson', splitter = 'best', max_features = 'auto'	0.7338712
24	DT	50_Startups.csv	Yes	1000	criterion='poisson', splitter = 'best', max_features = 'sqrt'	0.61354
25	DT	50_Startups.csv	Yes	1000	criterion='poisson', splitter = 'best', max_features = 'log2'	0.7527849
20	DT	50_Startups.csv	Yes	1000	criterion='absolute_error', splitter = 'random', max_features = 'auto'	0.8844623
21	DT	50_Startups.csv	Yes	1000	criterion='absolute_error', splitter = 'random', max_features = 'sqrt'	0.2544216
22	DT	50_Startups.csv	Yes	1000	criterion='absolute_error', splitter = 'random', max_features = 'log2'	0.8366811
23	DT	50_Startups.csv	Yes	1000	criterion='absolute_error', splitter = 'best', max_features = 'auto'	0.924006
24	DT	50_Startups.csv	Yes	1000	criterion='absolute_error', splitter = 'best', max_features = 'sqrt'	0.3372798
25	DT	50_Startups.csv	Yes	1000	criterion='absolute_error', splitter = 'best', max_features = 'log2'	0.7216379
20	DT	50_Startups.csv	Yes	1000	criterion='squared_error', splitter = 'random', max_features = 'auto'	0.8132448
21	DT	50_Startups.csv	Yes	1000	criterion='squared_error', splitter = 'random', max_features = 'sqrt'	0.6498452
22	DT	50_Startups.csv	Yes	1000	criterion='squared_error', splitter = 'random', max_features = 'log2'	-0.091629
23	DT	50_Startups.csv	Yes	1000	criterion='squared_error', splitter = 'best', max_features = 'auto'	0.89682
24	DT	50_Startups.csv	Yes	1000	criterion='squared_error', splitter = 'best', max_features = 'sqrt'	0.523891

25	DT	50_Startups.csv	Yes	1000	criterion=squared_error', splitter = 'best', max_features = 'log2'	0.5852376
26	DT	50_Startups.csv	Yes	1000	criterion='mse', splitter = 'random', max_features = 'auto'	0.7984821
27	DT	50_Startups.csv	Yes	1000	criterion='mse', splitter = 'random', max_features = 'sqrt'	0.8217434
28	DT	50_Startups.csv	Yes	1000	criterion='mse', splitter = 'random', max_features = 'log2'	0.540966
29	DT	50_Startups.csv	Yes	1000	criterion='mse', splitter = 'best', max_features = 'auto'	0.9180853
30	DT	50_Startups.csv	Yes	1000	criterion='mse', splitter = 'best', max_features = 'sqrt'	0.6578084
31	DT	50_Startups.csv	Yes	1000	criterion='mse', splitter = 'best', max_features = 'log2'	0.5753606
32	RF	50_Startups.csv	Yes	1000	n_estimators=100, random_state = 0	0.9460044
33	RF	50_Startups.csv	Yes	1000	n_estimators=50, random_state = 0	0.9446336
34	RF	50_Startups.csv	Yes	1000	n_estimators=100, criterion='squared_error', random_state = 0	0.9460044
35	RF	50_Startups.csv	Yes	1000	n_estimators=100, criterion='absolute_error', random_state = 0	0.9459097
36	RF	50_Startups.csv	Yes	1000	criterion='friedman_mse'	0.9395797
37	RF	50_Startups.csv	Yes	1000	criterion='poisson'	0.8116969
38	RF	50_Startups.csv	Yes	1000	criterion='poisson',max_features='sqrt'	0.7849983
39	RF	50_Startups.csv	Yes	1000	criterion='poisson',max_features='log2'	0.7206143
40	RF	50_Startups.csv	Yes	1000	criterion='friedman_mse',max_features='sqrt'	0.8344528
41	RF	50_Startups.csv	Yes	1000	criterion='friedman_mse',max_features='log2'	0.8110711
42	RF	50_Startups.csv	Yes	1000	criterion='absolute_error',max_features='sqrt'	0.8096159
43	RF	50_Startups.csv	Yes	1000	criterion='absolute_error',max_features='log2'	0.8301524
44	MLR	50_Startups.csv	No	0	NA	0.9358681