

RANDOM FOREST-REGRESSION-ML

Profit prediction pbm:

S.No	Criterion	n_estimators	max_features	r2 value
1.	Squared_error	50	None	0.942
2	Squared_error	100	Sqrt	0.805
3	Squared_error	100	None	0.947
4	Squared_error	50	Sqrt	0.820
5	Squared_error	50	Log2	0.765
6	Squared_error	100	Log2	0.812
7	Absolute_error	50	None	0.931
8	Absolute_error	50	Sqrt	0.833
9	Absolute_error	50	Log2	0.730
10	Absolute_error	100	None	0.943
11	Absolute_error	100	Sqrt	0.787
12	Absolute_error	100	Log2	0.844
13	mse	50	None	0.941
14	Mse	50	Sqrt	0.846
15	Mse	50	Log2	0.817
16	Mse	100	None	0.938
17	Mse	100	Sqrt	0.830
18	Mse	100	Log2	0.804
19	poisson	50	None	0.939
20	Poisson	50	Sqrt	0.775
21	poisson	50	Log2	0.722
22	Poisson	100	None	0.937

23	Poisson	100	Sqrt	0.778
24	poisson	100	Log2	0.791

- In the random forest algorithm, using hyper parameter (squared_error,n_estimators=100).we get r2 value=0.947.