

ASSIGNMENT REGRESSION ALGORITHM

BOOSTING ALGORITHM REPORT

→ Ada boost:

S.NO	LOSS	N ESTIMATOR	LEARNING RATE	R2 VALUE
1	linear	50	0.01	0.8740
2	linear	50	0.05	0.8769
3	linear	50	0.3	0.8577
4	linear	50	0.1	0.8691
5	linear	50	1	0.8594
6	linear	100	0.01	0.8802
7	linear	100	0.05	0.8664
8	linear	100	0.3	0.8533
9	linear	100	0.1	0.8603
10	linear	100	1	0.8334
11	square	50	0.01	0.8804
12	square	50	0.05	0.86721
13	square	50	0.3	0.6571
14	square	50	0.1	0.8352
15	square	50	1	0.4869
16	square	100	0.01	0.8778
17	square	100	0.05	0.8277
18	square	100	0.3	0.5352
19	square	100	0.1	0.7353
20	square	100	1	0.4649
21	exponential	50	0.01	0.8811
22	exponential	50	0.05	0.8770
23	exponential	50	0.3	0.7909
24	exponential	50	0.1	0.8656
25	exponential	50	1	0.6316
26	exponential	100	0.01	0.8762
27	exponential	100	0.05	0.6797
28	exponential	100	0.3	0.6986

29	exponential	100	0.1	0.8373
30	exponential	100	1	0.547

→ **XG boost:**

S.NO	CRITERION	MAX DEPTH	ETA	R VALUE
1	gbtree	2	0.01	0.7428
2	gbtree	2	0.1	0.8922
3	gbtree	2	0.2	0.8885
4	gbtree	3	0.01	0.8811
5	gbtree	3	0.1	0.8883
6	gbtree	3	0.2	0.8811
7	gbtree	5	0.01	0.7689
8	gbtree	5	0.1	0.8661
9	gbtree	5	0.2	0.8427
10	gbtree	7	0.01	0.7597
11	gbtree	7	0.1	0.8375
12	gbtree	7	0.2	0.8164
13	gblinear	3	0.01	0.4781
14	gblinear	3	0.1	0.7195
15	gblinear	3	0.2	0.7517
16	gblinear	5	0.01	0.4781
17	gblinear	5	0.1	0.7195
18	gblinear	5	0.2	0.7517
19	gblinear	7	0.01	0.4781
20	gblinear	7	0.1	0.7195
21	gblinear	7	0.2	0.7517