

S.No	Numpy Implementation of Gradient Descent	Rows(m)	Number of Features (n)	eta	eta_value	Delta	Number_of_Iterations (epoch)	Convergence_Level_Achieved
1	Executed	5	9	Varying everying 1000 iterations	0.001	0.01	6000	1.00E-08
2	Executed	10	9	Varying everying 1000 iterations	0.001	0.01	7000	1.00E-08
3	Executed	15	9	Varying everying 1000 iterations	0.001	0.01	6000	1.00E-08
4	Executed	20	9	Varying everying 1000 iterations	0.001	0.01	6000	1.00E-08
5	Executed	25	9	Varying everying 1000 iterations	0.001	0.01	6000	1.00E-08
6	Executed	30	9	Varying everying 1000 iterations	0.001	0.01	5000	1.00E-08
7	Executed	40	9	Varying everying 1000 iterations	0.001	0.01	1654	1.00E-08
8	Executed	50	9	Varying everying 1000 iterations	0.001	0.01	4000	1.00E-08
9	Executed	100	9	Varying everying 1000 iterations	0.001	0.01	3000	1.00E-08
10	Executed	200	9	Varying everying 1000 iterations	0.001	0.01	536	1.00E-08
11	Executed	250	9	Varying everying 1000 iterations	0.001	0.01	889	1.00E-08
12	Executed	5	9	Constant	0.001	0.01	65511	1.00E-08
13	Executed	10	9	Constant	0.001	0.01	Around 30L iterations	1.00E-08
14	Executed	15	9	Constant	0.001	0.01		1.00E-08
15	Executed	20	9	Constant	0.001	0.01	16453	1.00E-08
16	Executed	25	9	Constant	0.001	0.01	8430	1.00E-08
17	Executed	30	9	Constant	0.001	0.01	3103	1.00E-08
18	Executed	40	9	Constant	0.001	0.01	1081	1.00E-08
19	Executed	50	9	Constant	0.001	0.01	1400	1.00E-08
20	Executed	100	9	Constant	0.001	0.01	2163	1.00E-08
21	Executed	200	9	Constant	0.001	0.01	536	1.00E-08
22	Executed	250	9	Constant	0.001	0.01	889	1.00E-08
23	Executed	5	5	Constant	0.001	0.01	826691	1.00E-08
24	Executed	10	5	Constant	0.001	0.01	21383	1.00E-08
25	Executed	15	5	Constant	0.001	0.01	23538	1.00E-08
26	Executed	20	5	Constant	0.001	0.01	12037	1.00E-08
27	Executed	25	5	Constant	0.001	0.01	2144	1.00E-08
28	Executed	30	5	Constant	0.001	0.01	3197	1.00E-08
29	Executed	40	5	Constant	0.001	0.01	1105	1.00E-08
30	Executed	50	5	Constant	0.001	0.01	1049	1.00E-08
31	Executed	100	5	Constant	0.001	0.01	1467	1.00E-08
32	Executed	200	5	Constant	0.001	0.01	587	1.00E-08
33	Executed	250	5	Constant	0.001	0.01	488	1.00E-08
34	Executed	5	5	Varies every 1000 iterations	0.001	0.01	6000	1.00E-08
35	Executed	10	5	Varies every 1000 iterations	0.001	0.01	6000	1.00E-08
36	Executed	15	5	Varies every 1000 iterations	0.001	0.01	6000	1.00E-08
37	Executed	20	5	Varies every 1000 iterations	0.001	0.01	5000	1.00E-08
38	Executed	25	5	Varies every 1000 iterations	0.001	0.01	5000	1.00E-08
39	Executed	30	5	Varies every 1000 iterations	0.001	0.01	4000	1.00E-08
40	Executed	40	5	Varies every 1000 iterations	0.001	0.01	1891	1.00E-08
41	Executed	50	5	Varies every 1000 iterations	0.001	0.01	1457	1.00E-08
42	Executed	100	5	Varies every 1000 iterations	0.001	0.01	2000	1.00E-08
43	Executed	200	5	Varies every 1000 iterations	0.001	0.01	587	1.00E-08
44	Executed	250	5	Varies every 1000 iterations	0.001	0.01	488	1.00E-08
45	Executed	5	1	Constant	0.001	0.01	9387	1.00E-08
46	Executed	10	1	Constant	0.001	0.01	7541	1.00E-08
47	Executed	15	1	Constant	0.001	0.01	4023	1.00E-08
48	Executed	20	1	Constant	0.001	0.01	3315	1.00E-08
49	Executed	25	1	Constant	0.001	0.01	1252	1.00E-08
50	Executed	30	1	Constant	0.001	0.01	1373	1.00E-08
51	Executed	40	1	Constant	0.001	0.01	2075	1.00E-08
52	Executed	50	1	Constant	0.001	0.01	752	1.00E-08
53	Executed	100	1	Constant	0.001	0.01	212	1.00E-08
54	Executed	200	1	Constant	0.001	0.01	408	1.00E-08
55	Executed	250	1	Constant	0.001	0.01	399	1.00E-08
56	Executed	5	1	Varies every 1000 iterations	0.001	0.01	6000	1.00E-08
57	Executed	10	1	Varies every 1000 iterations	0.001	0.01	6000	1.00E-08
58	Executed	15	1	Varies every 1000 iterations	0.001	0.01	5000	1.00E-08
59	Executed	20	1	Varies every 1000 iterations	0.001	0.01	4000	1.00E-08
60	Executed	25	1	Varies every 1000 iterations	0.001	0.01	2000	1.00E-08
61	Executed	30	1	Varies every 1000 iterations	0.001	0.01	3000	1.00E-08
62	Executed	40	1	Varies every 1000 iterations	0.001	0.01	3000	1.00E-08
63	Executed	50	1	Varies every 1000 iterations	0.001	0.01	752	1.00E-08
64	Executed	100	1	Varies every 1000 iterations	0.001	0.01	212	1.00E-08
65	Executed	200	1	Varies every 1000 iterations	0.001	0.01	408	1.00E-08
66	Executed	250	1	Varies every 1000 iterations	0.001	0.01	399	1.00E-08