Aum Sri Sairam Assignment-1 logistic regression Parameter Tuning and performance measure

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Submitted by:

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Aims and Objectives:

Run logistic regression by changing the parameters (i.e. step size and error tolerance) and perfom performance analysis

Procedure:

Run the code and pass the parameters in the command line as given below: <python> <logisticRegression.py>

Analysis:

Serial no.	Alpha	Errol Tolerance	Time(min)	Accuracy
1	0.01	2	0.56	0.9912
2	0.01	3	0.34	0.9907
3	0.01	5	0.20	0.9904
4	0.1	11	4.32	0.9907
5	0.1	15	4.16	0.9911
<mark>6</mark>	0.1	20	0.56	0.9912
7	1	108	5.21	0.9906
8	1	115	3.59	0.9907
9	1	150	2.18	0.9911

Conclusion:

From above analysis we can conclude that the algorithm performs better for alpha value = 0.01 and error tolerance = 2 with accuracy 99.12%. The same accuracy is acheived with aplpha value= 0.1 and error tolerance= 20.