DEEP LEARNING REPORT (DSE316)

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1 Question 1

Cross entropy loss works better with logistic regression. .Cross entropy works better as it's faster to converge(to a minima in loss) and doesn't punish outliers as heavily Cross Entropy loss.In logistic regression we need to classify data into either 0 or 1 while cross entropy loss is convex on Logistic regression, MSE is not.

2 Question 2

According to wikipedia-A twice-differentiable function of a single variable is convex if and only if its second derivative is non negative on its entire domain. Therefore both Cross entropy and MSE will give COnvex shape as long as weights are non negative(for MSE)