HOMEWORK 4 REPORT

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HINGE LOSS ACCURACIES

An accuracy of 0.6 was achieved by a lmda = 1 and learningRate = 0.1

An accuracy of 0.75 was achieved by a lmda = 0.3 and learningRate = 0.1

An accuracy of 0.9 was achieved by a lmda = 0.1 and learningRate = 0.1

An accuracy of 0.65 was achieved by a lmda = 1 and learningRate = 0.01

An accuracy of 0.9 was achieved by a lmda = 0.3 and learningRate = 0.01

An accuracy of 0.75 was achieved by a lmda = 0.1 and learningRate = 0.01

An accuracy of 0.85 was achieved by a lmda = 1 and learningRate = 0.001

An accuracy of 0.75 was achieved by a lmda = 0.3 and learningRate = 0.001

An accuracy of 0.8 was achieved by a lmda = 0.1 and learningRate = 0.001

An accuracy of 0.75 was achieved by a lmda = 1 and learningRate = 0.0001

An accuracy of 0.75 was achieved by a lmda = 0.3 and learningRate = 0.0001

An accuracy of 0.75 was achieved by a lmda = 0.1 and learningRate = 0.0001

Best accuracy of 0.9 was achieved by a lmda = 0.3 and learningRate = 0.01

Test Set Accuracy (Hinge Loss): 0.764705882353

LOGISTIC LOSS ACCURACIES

D:/OSU/Sem2/ML-5523/hw4_starter/yolo.py:124: RuntimeWarning: overflow encountered in exp

gradient += (-Y[i] * X[i]* (1 / np.exp(np.logaddexp(0, big_term))))

An accuracy of 0.7 was achieved by a lmda = 1 and learningRate = 0.01

An accuracy of 0.75 was achieved by a lmda = 0.3 and learningRate = 0.01

An accuracy of 0.85 was achieved by a lmda = 0.1 and learningRate = 0.01

An accuracy of 0.85 was achieved by a lmda = 1 and learningRate = 0.001

An accuracy of 0.9 was achieved by a lmda = 0.3 and learningRate = 0.001

An accuracy of 0.85 was achieved by a lmda = 0.1 and learningRate = 0.001

An accuracy of 0.95 was achieved by a lmda = 1 and learningRate = 0.0001

An accuracy of 0.95 was achieved by a lmda = 0.3 and learningRate = 0.0001

An accuracy of 0.95 was achieved by a lmda = 0.1 and learningRate = 0.0001

Best accuracy of 0.95 was achieved by a lmda = 0.1 and learningRate = 0.0001

Test Set Accuracy (Logistic Loss): 0.823529411765