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Machine Learning Homework 1

n	trainingAccuracy	testingAccuracy
400	0.7100	0.7200
600	0.7400	0.7500
800	0.7600	0.7650
1000	0.7700	0.7700
1200	0.7800	0.7750
1400	0.7850	0.7800
1600	0.7900	0.7820
1800	0.7925	0.7840
2000	0.7950	0.7850

As the number of training examples increases, the training accuracy improves slightly, which shows the model's ability to better fit the training data. The testing accuracy also improves, as the model generalizes better with more data, but the rate of increase is slower for larger n 's. The gap between training and testing accuracies' narrows as n increases, indicating that the model is relying less on memorizing certain patterns from the training data. For rather large values of n , both accuracies converge/stabilize, showing that the model has reached its peak performance given the data.

