Programming Exercise 3: Logistic Regression

Machine Learning

Student Name: Ethan Hitchcock

PeopleSoft ID: 1408202

Question (1) **(20 points)**

Please give the value of gradient at initial theta (zeros) for ex3data1:

Initial gradient =

[ -0.100000

-12.009217

-11.262842 ]

Question (2) **(30 points)**

Please compute the minimum cost at theta found by fminunc for ex3data1:

Minimum cost = 0.203506

Question (3) **(10 points)**

Please predict an admission probability of a student with scores 70 and 50:

Admission probability = -6.632126

Question (4) **(10 points + 30 points)**

Please compute train accuracy for ex3data1:

Train accuracy1 = 89.000000

Please compute train accuracy for ex3data2:

Train accuracy2 = 83.050847