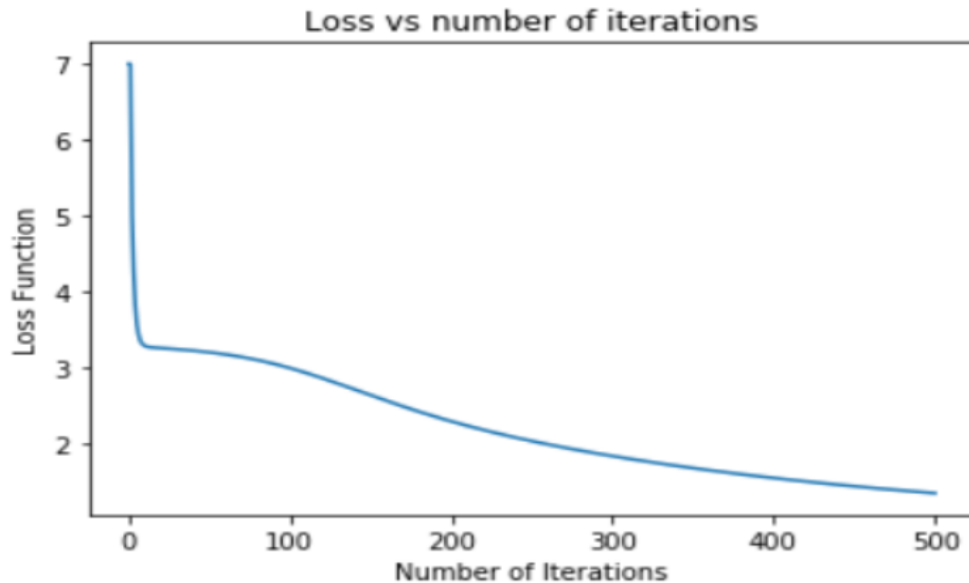**1.** Source code is submitted within zip folder.
2. Plot of loss function J vs. the number of iterations.

3. List the classification results for the following 10 examples from the training set (index starts from 1):
2171 145 1582 2446 3393 815 1378 529 3945 4628. For your reference, the images of these 10 examples
are shown in digits.jpg.
Digits.jpg:

Predicted numbers from the source code:

Accuracy after 500 iterations: 85.72%

Checking the given indices:
index: 2171 Prediction: [4]
index: 145 Prediction: [10] →0
index: 1582 Prediction: [3]
index: 2446 Prediction: [4]
index: 3393 Prediction: [6]
index: 815 Prediction: [1]
index: 1378 Prediction: [2]
index: 529 Prediction: [1]
index: 3945 Prediction: [7]
index: 4628 Prediction: [3]

Since the accuracy of the training is not 100%, for the given 10 sample digits, the first 9
predictions are correct. The last one is predicted wrong by the source code.