Assignment 4 Rubric

1.1

#10 points for show correct answer

if the answer is not correct, then 9

3 point for using correct expression like below

3 point for using numpy

3 points for using a list comprehension

1.2

1 point for using numpy

9 point for show correct answer

if the incorrect answer is given then use this rules

3 points for using the correct expression or formula

3 points for printing the value from a variable or computed amount.

2.1

4 point for using the correct gradient desc function from lecture

    # what to look for – to know where the 4points derive from.

    # look for the x, y, iteration and rate input parameter to a loop or function.

    # (internal 1 point) - Look for the y_hat prediction from using a current m and b and x

    # (internal 1 point) - Look for the mse calculation.

    # (internal 1 point) - calculation of the derivatives.

    # (internal 1 point) - for defining a function

6 point for modifying it to look for the lowest mse in the results without visual inspection.

2.2

total 15 points.

there are two ways that are acceptable.

Way 1

5 points for showing the actual points

5 points for showing the predicted points

5 points for showing a title, legend, or x or y axis labels.

another way to do it

5 points for using a linear regression model from sklearn

5 points for using a line for the prediction.

5 points for plotting the actual points

Question 2.3

7 points for correctly using step and iteration numbers

8 points for showing the best mse.

Question 2.4

 # 10 points total (the breakdown below)

 # 5 points for trying several different values of iterations and rate.

 # 4 point for showing the best value

 # 1 for showing the actual tests for those other variations.