CSE 7345

Quest 9: Regression and Performance

Due: Sunday Nov 18 at midnight

We have looked at several ways to compute linear regression :
   a) using a computational formulas
   b) using gradient descent

Download the file q9data.csv that contains sample data in two columns where column 1 holds the y-value and col2 holds the x-value

Part A.
Use computational formulae to come up with an estimate of the slope and y-intercept

Part B.
Use the code developed in class to write a gradient descent program to solve the same problem.
How close can you get to your results from part A?
Explain the effect of different learning rates on obtaining values that are closest to the values obtained from part A.

DO: Prepare a PDF file that contains

- A scatterplot of the data showing a plot of the line from part A in green and part B in red. These may be very close. In the plot display the two linear equation solutions with 2 decimal place accuracy.
- Include your code for both Part A and Part B

Submit a PDF to Canvas