CST8233: Lab #7

Simple Linear Regression

Objective

The objective of this lab is to familiarize the student with the theory topics covered in Week 9. Mainly, this lab focuses on **Simple Linear regression**

Earning

There is no mark for this lab. However, each student should finish the lab's requirements within the lab session and demonstrate the working code to the instructor.

Discussion

Write a program to implement the linear regression algorithms. The program asks the user to input the data then prints the predicted equation. Your output should look like the following test case data.

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```
Enter the no. of data pairs to be entered:
5

Enter the x-axis values:
20.5
32.7
51.0
73.2
95.7

Enter the y-axis values:
765
826
873
942
1032
S.no    x            y(observed)           y(fitted)
----------------------------------------------------------------
1.     20.5              765             771.767
2.     32.7              826             813.184
3.      51              873             875.311
4.     73.2              942             950.677
5.     95.7             1032             1027.06

The linear fit line is of the form:

y = 3.39487x + 702.172
```