

**CST8233: Lab #9**  
**Simple Linear regression**

**Objective**

The objective of this lab is to familiarize the student with the theory topics covered in Week 8. Mainly, this lab focuses on **Simple Linear regression**

**Earning**

To earn your mark for this lab, 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 simple least fit linear regression algorithm. The program asks the user to input the data then prints the predicted equation. Your output should be like the following example :

```
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
```