LAB# 5 DESCRIPTIVE STATISTICS

CST8233 W2021





LAB OBJECTIVE

The objective of this lab is to get familiar with the following:

Descriptive Statistics

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.

STATEMENT OF THE PROBLEM:

Part A:

Descriptive statistics are broken down into measures of central tendency and measures of variability (spread). Measures of central tendency include the mean, median and mode, while measures of variability include standard deviation, variance, and range.

- The mean is a numerical average of the data and one way of describing the center of a distribution.
- The median is the middle value of the data when the data values are ordered from largest to smallest (or vice-versa)
 - If the data contains an even number of cases, the median is the midpoint of the middle two values
- The standard deviation is a measure of how much variability there is in a distribution, or how spread out the data are

Given the following data set, that represent the quiz score of a certain class

Student	Garde
1	3
2	4
3	6
4	5
5	7
6	8
7	6
8	5
9	8
10	6

Compute Mean, Median, Standard Deviation. Show your results to your instructor.

Part B

Write a C\C++ program that accepts a set of data and Report the mean, median, and standard deviation of an input data set.

Test your program with the data given in the Part A, **but your program must be run with different input.**