

SfwrEng/CompSci 2S03 Fall 2015

Homework 5

You are to develop a C++ program that takes as input N values and prints their average (integer or 2-decimal floating point) and uncorrected sample (i.e., population) standard deviation (two decimal points) using the following formula:

$$S_N = \sqrt{\frac{1}{N} \sum_{i=1}^N (x_i - \bar{x})^2}$$

The last input value is marked by '#'. For example, if the name of the program is HWK5_borzoo, the following is a sample execution:

```
$HWK5_borzoo Enter value 1: 5
Enter value 2: 3
Enter value 3: #
```

```
The average is 4
The standard deviation is 1.00
```

If you choose to implement with static arrays, you may assume a maximum array size of 100.

Deliverable

The .cpp file. If your program does not compile, you will receive no credit. Your files must be submitted by 8:30am on Friday Nov. 13 on Avenue to Learn.

Format

Your file names should be of the form HWK5_MacID.cpp.

Also, you should add the following to the beginning of your C++ source file:

```
/*
Name: [Your full name (no nicknames or chosen names)]
MacID: [Your MacID]
Student Number: [Your student number]
Description: [This is an informative excerpt about this file.]
*/
```

Failure in meeting this format will result in 0 credit.