# CSCI 3327 Visual Basic (Fall 2011) <br> Assignment \#5 

Instructor: Dr. Xiang Lian

Due Date: See the course website
This assignment is to get you proficient in arrays. Please write a program to solve the following formula to find standard deviation for a set of scores. Sample program is given below.

$$
\begin{aligned}
& \sigma=\sqrt{\frac{\sum[x-\bar{x}]^{2}}{n-1}} \\
& \sigma=\text { lower case sigma } \\
& \sum=\text { capital sigma } \\
& \bar{x}=\times \text { bar }
\end{aligned}
$$

Here are the steps needed to solve this formula:

1. Enter a set of scores;
2. Find the average of these scores;
3. Find the deviation of each of the scores from the mean and square the difference;
4. Sum all the deviation squared;
5. Divide the sum by total number of scores minus 1 ;
6. Find the Square root of the result, which is exactly the standard deviation.

Please submit:

1. Program listing; and
2. The screen captures (see the Appendix).

- Your program should begin with a comment section that would include the following:

PROGRAMMERS NAME: $\qquad$
STUDENT ID: $\qquad$
CLASS: $\qquad$ ASSIGNMENT \#: $\qquad$
DATE DUE: $\qquad$ DATE TURNED IN: $\qquad$

- Note: Please send the files you created to Blackboard.


## - Appendix: Examples of Screen Captures



```
煰 Array Grade Program
This Program Calculates Standard Deviation for a set of scores entered.
Enter Scores Separated by space and Press Save to Array Button
8878669987787898897887867776
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline \multirow[t]{3}{*}{\[
\begin{array}{|l|}
\hline 88 \\
78 \\
66 \\
99 \\
87 \\
78 \\
78 \\
98 \\
89 \\
78 \\
\hline
\end{array}
\]} & - & No of Scores & 14 & Sum & 1165 & Average & 83.21 \\
\hline & = & Sum of Dev Sq & 1,056.36 & & & & \\
\hline & - & Std Dev & 9.01 & & & & \\
\hline
\end{tabular}
```

