Csci 41: Introduction to Data Structures
Lab Exercise 1
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Objectives:
1. Review C++ Part I (control flows, call by reference, call by value, call by pointer, array).
Exercise Summary:
Write a C/C++ program that has a menu (please use SWITCH) to request an input from user.

If input is 1: call int findMin(int a[], int size) function. This will return the minimum value of integer array a. size is the length of the array.

If input is 2: call int calculate(string exp) function. This function will return the computation of a string expression (exp). For example:

calculate("54321+222") will return 54543
calculate("120*20") will return 2400
calculate("235/3") will return 78
calculate("356-32") will return 324

If input is 3: call double computeAvg(int a[][a const value of # column], int row, int column) function. This function will compute the average of all elements in a two-dimensional array.

If input is 4: call *squareByValue*. The function takes in an integer variable and then return the square value of the variable. Make sure you print out the input variable used for squareByValue after the function call and see if its value is changed or not.

If input is 5: called squareByReference. Similar to squareByValue, this function computes the square value of an integer reference variable. Note: This function returns "void", not "int". Make sure you print out the input variable used for squareByReference after the function call and see if its value is changed or not.

If input is -1: jump out the menu. Note that the menu should continuously take inputs until -1 is input.

When the lab session is over, compress your **cpp** file(s) (and **header** file(s), if any) into **a single zip file** called Your**LastName**-Lab1.zip (e.g., Liu-Lab1.zip) and upload it to Blackboard. (**DO NOT** upload the entire project. Do Not upload EXE file). Note that if you do not submit whatever you have done by the end of lab, you are considered absent and lose 0.5%. You may continue to work on your lab after submission, but you must turn in whatever you have by the end of lab session.

Minimum requirements: Menu and at least 3 functions.