**CSCI 520L**

**Programming Assignment #3**

To be done in the lab

(Friday, Sep. 12, JOUR 102, 2:30pm-4:10pm)

Turn in your work in the drop box for Assignment 3 (for Week 3).

Problem AV10: Return the average of the last 10 input numbers

Input: Positive real numbers (entered one at a time)

Output: After every new input, the new average of the last 10 numbers entered will be printed

Example dialogue:

90 <ENTER>

AVERAGE IN THE LAST 10 IS 90

90 <ENTER>

AVERAGE IN THE LAST 10 IS 90

90 <ENTER>

AVERAGE IN THE LAST 10 IS 90

90 <ENTER>

AVERAGE IN THE LAST 10 IS 90

90 <ENTER>

AVERAGE IN THE LAST 10 IS 90

90 <ENTER>

AVERAGE IN THE LAST 10 IS 90

90 <ENTER>

AVERAGE IN THE LAST 10 IS 90

90 <ENTER>

AVERAGE IN THE LAST 10 IS 90

90 <ENTER>

AVERAGE IN THE LAST 10 IS 90

90 <ENTER>

AVERAGE IN THE LAST 10 IS 90

100 <ENTER>

AVERAGE IN THE LAST 10 IS 91

85 <ENTER>

AVERAGE IN THE LAST 10 IS 90.5

In this assignment, you write C++ programs for Problem AV10. You are required to create a circular list to store and process the last 10 inputs. This problem may be solved without a circular list. Such solutions **will not be accepted**. Both **correctness** and **efficiency** of your programs are important.

You are required to use **a circular array** to create a circular list with which you keep track of the last 10 inputs. You may start with the incomplete program in Attachment 1, or you can write it from the scratch.

Good Luck

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/\* ATTACHMENT 1: \*/

#include <stdio.h>

#include <iostream.h>

/\*

This program segment was written for CSCI 520L Lab and CSCI 520.001 Course Assignment #3

Problem AV10: Return the average of the last 10 input numbers

Input: Positive real numbers (entered one at a time)

Output: After every new input, the new average of the last 10 numbers entered will be printed

You are asked to write a C++ program for Problem AV10. You are required to use a circular array to create a circular list with which you keep track of the last 10 inputs.

\*/

static const int n=10; /\* circular list size limit \*/

int cArray[10];

int main()

{

return 0;

}