CSI 201 — Computer Science I

Homework #07 - due March 31, 2006

Write the following program on sampson. Hand it in by printing the source in GLDS 202 using `enscript hw7.cpp`. To receive a grade, your program MUST compile and execute on sampson in the 201 directory under the filename hw7.cpp

Remember to always cd 201 and save your work. Your program output should exactly match the sample execution shown below for full credit. Executing ./p201 will test your program against some other sample executions. To receive a grade higher than C, you should have all PASS when executing ./p201. This is a necessary but not sufficient quality to receive a grade greater than C (as you must still follow the instructions of the assignment).

Create a program to compute the average of a partially filled array of floats. This program will have at least three functions: input, output, and average. These functions should work with any partially filled array of floats. The maximum number of elements in the array will be 100. Sample execution is below.

Sample Execution:

```
How many elements are needed: -1
Number of elements must be > 0 and < 100
How many elements are needed: 101
Number of elements must be > 0 and < 100
How many elements are needed: 0
Number of elements must be > 0 and < 100
How many elements are needed: 5
Input element 1: 1
Input element 2: 2
Input element 3: 3
Input element 4: 4.4
Input element 5: 2.1
The average of the array is 2.5
```