CSC 461 Programming Languages

FALL 2024

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Ass #1 10 points Due: Monday Sept. 16 th 11:59 PM (Talk to me if that is a problem 😊)

Create a complete pseudo-code program to do the following using the PseudoCode language developed in class using **Absolute Addressing**.

There is 1 deliverable:

1. You should dropbox me the source code in a file called **A1.dat** You should include the input cards shown below in the program as a test.

THE PROGRAM:

First you will read in a value **N** which holds the number of values to be read in and sort them in ascending order. (so if **N** is 20 then there will be 20 more cards to read in.)

Read in the values into an array.

Bubble-Sort the array

{you must **use the Bubble-sort algorithm.** Below I have modified the simple Bubble sort to use bottom tested loops to help you a little as that is the type of loop our language supports with Incr & test.

```
int i;
int j;
int t;

i = 0;
do
{
  j=0;
  do
  {
      if (A[j] > A[j+1])
      {
         t= A[j];
         A[j] = A[j+1];
         A[j+1] = t;
       }
        j++;
   }while( j < N-1);
    i++;
}while(i < N-1);
```

After sorting the values you should print them out in order.

Finally, you should print out the **values between 50 and 150** (inclusive) in **Ascending** order (small to big)

Below are the input cards to use for your test (include in your file) AND then what your output should look like.

The program you turn in should use these input cards!!!!!!!!

Note : you can assume that N will be in the range 5 to 300 if that helps. ☺

INPUT CARDS

10
94
150
113
37
63
160
128
235
117
1

OUTPUT FROM EXECUTION first thing to Print - The numbers sorted 😊

1
:
235

OUTPUT FROM EXECUTION Second thing to Print

63
94
113
117
128
150