

Homework V

COMSC-044

Fall 2020

Homework V-A

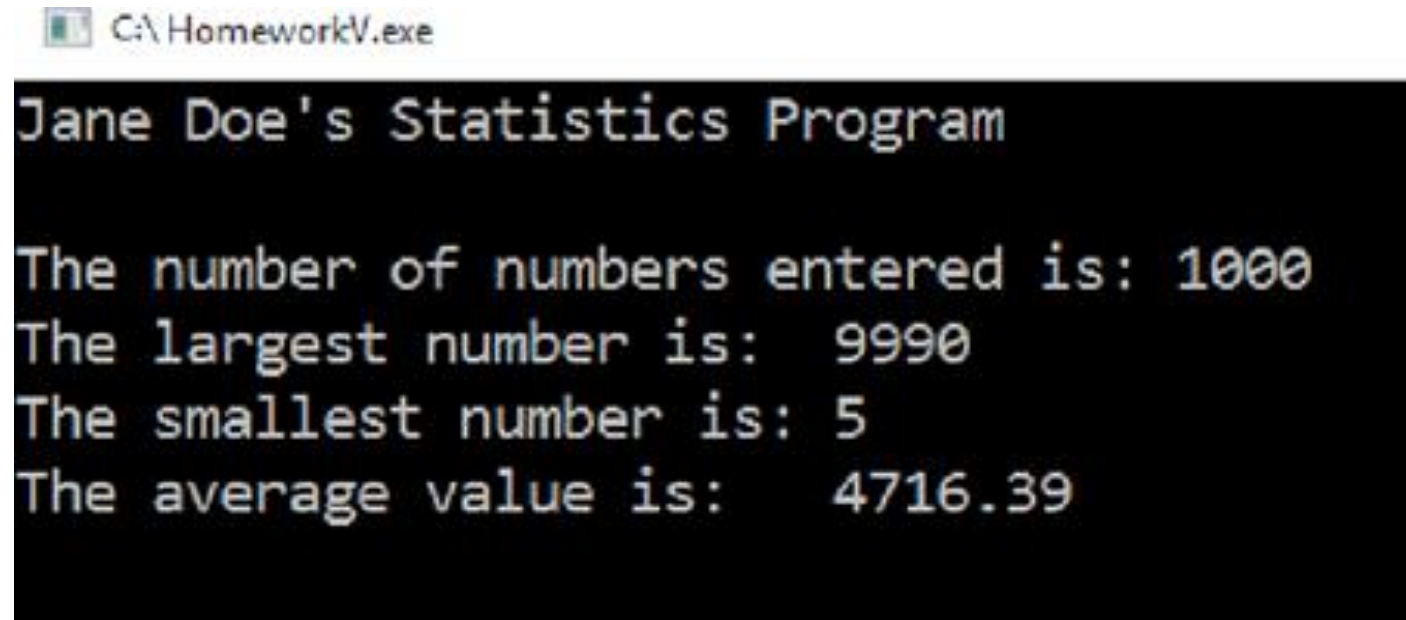
Determining Largest, Smallest & Mean from File Input

- Write a program, called *YourName_HwrkV-a*, which lets the user enter numbers from a file called “Random.txt” until the file is entirely read.
- After the file has been read in, the program should print out:
 - The Largest number entered,
 - The Smallest number entered,
 - The total count of numbers typed in,
 - The Average of all the numbers entered.
- The program should check to be sure that at least one value was entered so that when computing the Average, the program does not divide by zero.

Homework V-A

Determining Largest, Smallest & Mean from File Input

- Here's an example of a typical run:



```
C:\HomeworkV.exe  
Jane Doe's Statistics Program  
  
The number of numbers entered is: 1000  
The largest number is: 9990  
The smallest number is: 5  
The average value is: 4716.39
```

Homework V-B

Creating File of PseudoRandom Numbers

- In HomeworkV-a, we used a file of Random numbers which was generated by a C++ program.
- Your job is to write the program, *YourName_HwrkV-b.cpp*, which actually generates these numbers.
- The numbers should each be Integers, between 1 and 999.
- Place 1000 of these numbers in the file *LastnamefirstInitial-Random.txt* (where *LastnamefirstInitial* would be your last name followed by your first initial. In other words, if your name were Alan Turing, then the file would be called TuringA-Random.txt).

Homework V-B

Creating File of PseudoRandom Numbers

- You can use your HomeworkV-a program to test the data that you have created. After your program has executed, it should leave the following message – except that you should use your name, not Alan's.



- Place the program: *YourName_HwrkV-b.cpp*, in your dropbox.
- Be sure to also include in your dropbox the file: *LastnamefirstInitial-Random.txt*.
- Hint: I found Program 3-26 and Program 5-20 both helpful.