Topic	Practical Assignment 3
Assignment Type	☒ Assessed ☐ Non-assessed ☒ Individual ☐ Group
Module	CSE101 Computer Systems
Due Date	November 3rd, 2017 (Friday)

1. Assignment

Write a program in assembly that:

1. Prompt the user to input a number between '2' to '5', which is used to run a loop counter, i.e. `counter`.
2. Run the loop to read in a series of positive integers and allow the user to terminate the loop when he/she enters any negative integer.
3. When the program terminates, print out an exit and number of loops message.
4. Sort the numbers from lowest to highest then print out the results.
5. Add all the numbers and print out its total, i.e. `totalAmt`.

2. Learning Outcome

1. To understand the components of a computer system, their functions, and interactions.
2. To develop inline assembly programming skills.

3. Requirements and Assessment

Your program MUST be developed using Visual C++ inline assembly language.

1. Your program can compile and run. (10 marks)
2. Run a loop based on `counter` and ensure the input is a positive integer. Should the user input a negative integer, exit the program. (10 marks)
3. Print out an exit and number of loops message. (5 marks)
4. Print out the series of positive integers that have been entered, starting from the lowest to the highest. (10 marks)
5. Print out the series total, i.e. `totalAmt`. (5 marks)
6. Well-commented, stapled program listing for your solution. (60 marks)

4. Sample Output

A sample output from the program is shown below.

```
Select total number of positive integers (between 2-5): 5

Enter positive integer 1: 67

Enter positive integer 2: 13
```

```
Enter positive integer 3: 21
Enter positive integer 4: 39
Enter positive integer 5: -9
Program terminates and has looped 4 times.
Your integers from lowest to highest is 13, 21, 39, 67
The total amount is 140
```

5. What to do during the assessment upon the due date?

1. Sign for attendance at the pre-scheduled assessment timeslot.
2. Demonstrate and explain to the lab demonstrator that your program works for the problem assigned.
3. Hand in a well-commented, stapled program listing with the module title and your name/student number shown on the title page. Your program listing should not exceed 4 pages.
4. You must also sign and declare non-plagiarism.

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