

Topic	Practical Assignment 4
Assignment Type	<input checked="" type="checkbox"/> Assessed <input type="checkbox"/> Non-assessed <input checked="" type="checkbox"/> Individual <input type="checkbox"/> Group
Module	CSE101 Computer Systems
Due Date	December 6 th , 2017 (Wednesday)

1. Assignment

Write a program in assembly that:

1. Read a string of your name in English or Chinese PinYin, e.g. "Alan Turing".
2. Loop and store each character onto a stack.
3. Output and display your name in reverse, e.g. "gniruT nalA".
4. Output and display the length of the string (including whitespaces).
5. Display a message when the program successfully completes.

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. Correctly accepts a string input and can then display that string in reverse using a stack. (10 marks)
3. Correctly display the length of the string (including whitespaces). (5 marks)
4. When the program successful completes, display the message "End of program". (5 marks)
5. Well-commented, stapled program listing for your solution. (70 marks)

4. Sample Output

A sample output from the program is shown below.

```
Please enter your name: Alan Turing
Your name in reverse: gniruT nalA
The length of your name is 11
End of program.
```

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 8 pages.
4. You must also sign and declare non-plagiarism.

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