

**National Sun Yat-Sen University**  
**ASSEMBLY LANGUAGE AND MICROCOMPUTER**  
**Programming Assignment #1**  
**Due 11:59 PM Thu Nov 9 2017**

1. <**Programming Problem I**>Write an ARM assembly code to implement a *reverse* program which can print out the input string in reverse order to the screen. In addition, the English letters in the string have to be converted to lowercase. For example, when you execute reverse program as follows:

**arm-none-eabi-run reverse "It is Tom's apple."**

Then the screen should show the following results:

**reversed result: .elppa s'mot si ti**

2.

Note:

- (a) For this programming homework, please download the template assembly program from the course website. You can refer to the sample code shown in the course website.
- (b) You should submit a compressed file (named as your student ID, **B033040001.rar** for example) which contains an .out file (named as **a.out**) and an assembly code (named as **a.s**). You should upload it to NSYSU Cyber University before the deadline.
- (c) Homework submitted after the deadline will not receive any score.