## National Sun Yat-Sen University ASSEMBLY LANGUAGE AND MICROCOMPUTER Program #3

## Due 11:59 PM Dec 15 2016

<Programming Problem III> Write an ARM assembly code to implement a showcode program which can display the instruction contents of your program. Your program has to show every data processing instruction written in your program. In addition, you have to show the relative PC and conditional code of every instruction. For example, if you execute the program as follows:

## showcode

Then the screen should display the following results

PC	condition	instruction
0	AL	ADD
4	EQ	SUB
8	LS	XXX
12	EQ	MOV
••••	• • • • • • • • • • • • • • • • • • • •	•••••

Here the instruction for PC=8 is not an ARM data processing instruction. Therefore you just need to display **xxx** in instruction field.

## Note:

The submission of your homework should follow the method announced by TA before the deadline. Homework submitted after the deadline will not receive any score.