

National Sun Yat-Sen University
ASSEMBLY LANGUAGE AND MICROCOMPUTER
Program #2
Due 11:59 PM Dec 9 2017

<**Programming Problem II**> 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 data processing instructions, you should also list their operands' information. For example, if you execute the program as follows:

showcode

Then the screen should display the following results

PC	condition	instruction	dstreg	1st-op	2nd-op
0	AL	ADD	r3	r1	10
4	EQ	SUB	r4	r3	r2
8		xxx			
12	EQ	MOV	r6	r1	

.....

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.