

Lab Week 3- 15/10/2014Eng. Muhammad Sami

Using the previously downloaded “sicsim.jar” from Week 0 material, run and experiment with the following code:

Program 1:

	LDA	ALPHA	LOAD ALPHA INTO REGISTER A
	ADD	INCR	ADD THE VALUE OF INCR
	SUB	ONE	SUBTRACT 1
	STA	BETA	STORE IN BETA
	LDA	GAMMA	LOAD GAMMA INTO REGISTER A
	ADD	INCR	ADD THE VALUE OF INCR
	SUB	ONE	SUBTRACT 1
	STA	DELTA	STORE IN DELTA
	.		
	.		
	.		
ONE	WORD	1	ONE-WORD CONSTANT
.			ONE-WORD VARIABLES
ALPHA	RESW	1	
BETA	RESW	1	
GAMMA	RESW	1	
DELTA	RESW	1	
INCR	RESW	1	

Program 2:

	LDX	ZERO	INITIALIZE INDEX REGISTER TO 0
MOVECH	LDCH	STR1,X	LOAD CHARACTER FROM STR1 INTO REG A
	STCH	STR2,X	STORE CHARACTER INTO STR2
	TIX	ELEVEN	ADD 1 TO INDEX, COMPARE RESULT TO 11
	JLT	MOVECH	LOOP IF INDEX IS LESS THAN 11
	.		
	.		
	.		
STR1	BYTE	C'TEST STRING'	11-BYTE STRING CONSTANT
STR2	RESB	11	11-BYTE VARIABLE
.			ONE-WORD CONSTANTS
ZERO	WORD	0	
ELEVEN	WORD	11	

Submission: Experiment with the code, and submit a similar code to add an array of 5 elements initialised to value 5 each and store the result in a reserved memory location.

Good luck.