

1. Assume that the memory has 256 cells. Decode instruction encoded as hexadecimal notation and decide the contents of the following cells of memory after every instructions:

Instructions discussed in last class: 116C 2201 3201

Try more instructions: 4032 5231 7231 8231
 9231 A202 B200 C000

RAM

Address	Initial contents	Final contents after instructions
00	15	
01	6C	
02	16	
03	6D	
04	50	
05	56	
06	30	
07	6E	
08	C0	
09	00	
0A	00	
0B	00	
.....		
6C	23	
6D	11	
6E	00	
....		
FF	00	

Registers	Initial contents	Final contents after instructions
R0	FF	
R1	23	
R2	00	
R3	11	
....		
R15	00	
PC	00	
IR	FFFF	

2. Question 7 in page 89

3. Program Execution

Question 3 in page 96

Address	Contents
A4	20
A5	00
A6	21
A7	02
A8	22
A9	01
AA	B1
AB	B0
AC	50
AD	02
AE	B0
AF	AA
B1	C0
B2	00
.....	
6C	23
6D	11
6E	00
....	
FF	00

Registers	Initial contents	Content after the first execution of instruction at address AA	Content after the second execution of instruction at address AA
R0	FF		
R1	FF		
R2	FF		
....			
R15	FF		
PC	FF		
IR	FFFF		

It implements the following C program:
for (int i=0 ; i<3; i++);

4. Homework

Question 6, 7 of page 89 Question 1, 4 of page 97
Due: February 5, 2005