

## MIT Tutorial - 2

1	<p>Specify the output at PORT1 if the following program is executed.</p> <pre>MVI B, 82H MOV A, B MOV C, A MVI D, 37H OUT PORT1 HLT</pre>												
2	<p>Identify the contents of the registers and the flags at the following instructions are executed.</p> <table><tr><td>A</td><td>B</td><td>C</td><td>D</td><td>S</td><td>Z</td><td>CY</td></tr></table> <pre>MVI A, 00H MVI B, F8H MOV C, A MOV D, B HLT</pre>	A	B	C	D	S	Z	CY					
A	B	C	D	S	Z	CY							
3	<p>Identify the contents of the registers and the flags at the following instructions are executed.</p> <table><tr><td>A</td><td>B</td><td>S</td><td>Z</td><td>CY</td><td></td></tr><tr><td>00</td><td>FF</td><td>0</td><td>1</td><td>0</td><td>--- initial contents</td></tr></table> <pre>MVI A, F2H MVI B, 7AH ADD B OUT PORT0 HLT</pre>	A	B	S	Z	CY		00	FF	0	1	0	--- initial contents
A	B	S	Z	CY									
00	FF	0	1	0	--- initial contents								
4	<p>Identify the contents of the registers and the flags at the following instructions are executed.</p> <table><tr><td>A</td><td>C</td><td>S</td><td>Z</td><td>CY</td><td></td></tr><tr><td>00</td><td>00</td><td>0</td><td>1</td><td>0</td><td>--- initial contents</td></tr></table> <pre>MVI A, 5EH ADI A2H MOV C, A HLT</pre>	A	C	S	Z	CY		00	00	0	1	0	--- initial contents
A	C	S	Z	CY									
00	00	0	1	0	--- initial contents								
5	<p>Identify the contents of the registers and the flags at the following instructions are executed.</p> <table><tr><td>A</td><td>B</td><td>S</td><td>Z</td><td>CY</td></tr></table> <pre>MVI A, A9H MVI B, 57H ADD B ORA A</pre>	A	B	S	Z	CY							
A	B	S	Z	CY									
6	<p>Identify the contents of the registers and the flags at the following instructions are executed.</p> <table><tr><td>A</td><td>B</td><td>S</td><td>Z</td><td>CY</td></tr></table> <pre>XRA A MVI B, 4AH SUI 4FH ANA B HLT</pre> <p>What operation can be performed by using XRA A instruction ?</p>	A	B	S	Z	CY							
A	B	S	Z	CY									

7	<div>MVIC, 03H LXI H, 2000H MOV A, M DRC C LOOP: INX H MOV B, M, CMP B JNC LOOP2 MOV A, B LOOP2: DCR C JNZ LOOP STA 2100H HLT</div> <div><div>1. What does the above program do?</div><div>2. At the end of the program, what will be<div><div>a. The contents of the registers A, B, C, H and L?</div><div>b. The condition of the carry and zero flags?</div><div>c. The content of the memory locations 2000H, 2001H, 2002H and 2100H.</div></div></div></div>
8	<div>This program is to multiply the numbers 0AH by 0BH and stored the result in Accumulator. If contents of B=0AH, C=0BH then complete the following program.</div> <div><div>MVI A, 00H</div><div>LOOP: ..... ..... .....</div><div>HLT</div><div>END</div></div>
9	<div>Identify the contents of the registers, the memory location (2055H), and the flags at the following instructions are executed.</div> <div><div>AHLSZCYM(2055H)</div><div>LXI H,2055H MVI M,8AH MVI A,76H ADD M STA 2055H HLT</div></div>