1)

a) 8->1000 A->1010 9->1001

1000 1010 1001

b) E->1110 F->1111 3->0011

1110 1111 0011

c) 0001->2 1110->E 0001->2

2E2

d) 1111->F 1110->E 1101->D 1011->B

FEDB

2)

43->C 6F->o 6D->m 70->p 75->u 74->t 65->e 72->r

Mesaj=Computer

3)

a) 5->00101 1->00001 00001'in two's complement=11111

00101+11111=100100 (owerflow)

b) 5->00101 11->01011 01011'in two's complement=10101

00101+10101=11010 (no owerflow)

4)

a) 01001011 AND 10101011=00001011

b) 01001011 OR 10101011=11101011

c) 01001011 XOR 10101011=11100000

5)

a)7123-> would cause the result of OR ing the contents of registers 2 and 3 to be placed in register 1

.

b)2BCD->would cause the value CD to be placed in register B.

6)

```
load R1,[0xA0]
load R2,[0xA1]
load R3,0xF0
load R4,0x0F
and R1,R1,R3
and R2,R2,R4
addi R5,R1,R2
store R5,[0xA2]
halt
```