Lab 05

Q1. WAP to convert a hexadecimal number less than 10H (*Assume 0EH*) into an equivalent BCD number.

```
MVI A, 0EH

ADI 06H

DAA

HLT
```

Q2. Convert an eight-bit binary number into equivalent BCD number.

```
MVI C,FF

MVI D, 00

LOOP2: ADI 01 // COUNT THE NUMBER ONE BY ONE

DAA // ADJUST FOR BCD COUNT

JNC SKIP

INR D

SKIP: DCR C

JNZ LOOP2

STA 9000 // STORE THE LEAST SIGNIFICANT BYTE

MOV A,D

STA 9001 // STORE THE MOST SIGNIFICANT BYTE

HLT
```

Q3. WAP for converting a 2-digit BCD number to its binary equivalent in 8085.

```
MVI B, 00100011B

MOV A, B

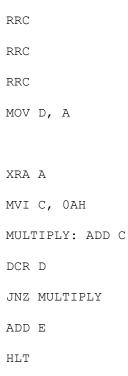
ANI 0FH

MOV E, A

MOV A, B

ANI FOH

RRC
```



Q4. WAP to convert a hexadecimal digit into ASCII code.

Add [0-9 -> 30H, A-F ->37H]

MVI A, OCH

CPI OAH ;A-OAH

JC SKIP7ADD

ADI 07H

SKIP7ADD: ADI 30H

 $_{
m HLT}$

Q5. WAP to convert ASCII into BCD conversion.

MVI A, 31H

CPI 39H ;A-0AH

JC SKIP7ADD

SUI 07H

SKIP7ADD: SUI 30H

HLT