**Binary Manipulations**

**Ex No 4**

**Date**

1.Finding a given number is Odd or Even. Change memory location Odd to 01h if Odd number.

.model small

.stack

.data

num db 01h

odd db ?

.code

.startup

mov al,num

and al,01h

jnz set

mov odd,00h

.exit

end

set:mov odd,01h

.exit

end

2a. Finding number of 0’s in a given number and store the count in a register

.model small

.stack

.data

num db 10h

.code

.startup

mov bl,00h

mov al,num

mov cx,0008h

loop1: rcl al,1

jb exit

inc bl

exit: loop loop1

.exit

End

2b. Finding number of 1’s in a given number and store the count in a register

**Assignment**

1. Write an 8086 assembly language program to find a given number is divisible by 4. If it's divisible move FFh to a memory location or move 00h.
2. Write an 8086 assembly language program to find a given signed number is positive or negative. If it's negative move 01h to dl or move 00h to dl.