

Bit Manipulation

In logical AND operator if first condition is false then it doesn't check for 2nd and 3rd conditions and so on .

Bitwise AND operator even if first condition if false it still goes on to the next conditions.

```
Main()
{
    Int a=10;

    if(a>100 & a++<200 & a++==12)
        printf("Hello %d",a);
    else
        printf("Hai %d",a);
}
```

Output is Hai 12

if Logical AND are used then we get Hai 10.

In logical OR operator if first condition is true then it doesn't check for 2nd and 3rd conditions and so on .

Bitwise AND operator even if first condition if true it still goes on to the next conditions.

```
Main()
{
    Int a=10;

    if(a>100 | a++<200 | a++==12)
        printf("Hello %d",a);
    else
        printf("Hai %d",a);
}
```

Output is Hello 12

if Logical OR are used then we get Hello 11.

Negation

$N = -(n+1)$

```
Int a=~100
printf(a)
```

Output is -101

```
Int a=~999  
printf(a)
```

Output is 998