BINARY OPERATOR

Mathematical operatins like addition,subtraction,multiplication,division are done in bit level .to perform bitlevel operations on c programming,bitlevel operations are used

THERE ARE 6 BITWISE OPERATOR

1. BITWISE AND OPERATOR (&)

The output of bitwise AND operator(&) is one if corresponding bits of both the operands is one and 0 if either of the bit of operand is 0.

(it plays the same role as multiplication plays in mathematics)

Syntax:

Int a=12,b=25;

Printf(“output is =%d”,a&b);

1. BITWISE OR OPERATOR (|)

THE output of bitwise OR operator is 1 if either of the corresponding bit of the operand is 0

And 1 if both the bits of corresponding operand is 1.

( it plays the same role as addition plays in mathematics)

Syntax

Int a=12,b=25;

Printf(“output is =%d”,a|b);

### BITWISE XOR OPERATOR (^)

The output of bitwise XOR operator is 1 if bits of both the corresponding operators are opposite.(same as AND operator)

Syntax

int a=12,b=25;

printf(“output is =%d,a^b);

#### BITWISE COMPLIMENTARY OPERATOR (!)

Bitwise complimentary operator is unary operator which changes 1 to 0 and 0 to 1.

It is basically 2’s complement

Syntax

int a=-12,b=25;

printf(“output is%d\n”,!a);

printf(“output is %d”,!b);

out put will be

11

-26

##### 5. RIGHT SHIFT OPERATOR (>>)

Right shift operator shifts all bits towards right by certain no. of specified bits. Denoted by >>

Syntax:

Int a=12;

Printf(“output is %d”,a>>2);

###### 6,LEFT SHIFT OPERATOR(<<)

Left shift operator shifts all the bits towards left by certain no. of specified bits. Denoted by<<

Syntax:

Int a=12;

Printf(“output is %d,a<<2);