1.BITWISE OPERATORS

DESCRIPTION

These operators are used to perform bit operations. Decimal values are converted into binary values which are the sequence of bits.

Operators	Operation
&	bitwise AND
|	bitwise OR
~	bitwise NOT
^	bitwise XOR
<<	shift left
>>	shift right

Example for bitwise AND(&) :

```
#include<stdio.h>
int main()
{   int  a=12 , b=25;
     Printf("output=%d",a&b);
     return 0; }
```

Output :

output=8

Bitwise OR (|):

```
#include<stdio.h>
int main()
{
    int a=12 , b=25;
    Printf(“output= %d”, a|b);
    return 0;
}
```

Output:

Output=29

Bitwise not (~):

```
#include<stdio.h>
int main ()
{
```

```
    printf("output=%d\n",~45);
    printf("output=%d\n",~ -12);
    return 0;
}
```

Output:

Output=46

Output=11

Bitwise XOR (^):

```
#include<stdio.h>
int main()
{
    int a=12 , b=25 ;
    printf("output=%d",a^b);
    return 0;
}
```

Output:

Output=21

2.TERNARY OPERATOR

DESCRIPTION

If any operator is used on three operands or variables is known as ternary operator. It is represented as (? :) .

It is also known as conditional operator .

Ternary operator is an operator that takes three arguments.

- Comparison argument
- True comparison
- False comparison

Syntax:

Expression -1 ? expression -2 : expression -3

Here, expression 1 is the condition and if the condition is true expression 2 will be executed otherwise expression 3 will be executed .

Example:

To find largest among two number using ternary operator:

```
#include<stdio.h>
int main ()
{
   int n1=5 , n2=10 , max;
   max = (n1 > n2) ? n1 : n2 ;
   printf("largest number among" "%d and %d is %d.", n1 ,n2,
max);
    return 0;
 }
```

Output :

largest number among 5 and 10 is 10.

3.CALCULATOR PROGRAM

```
#include <stdio.h>
int main()
{
    int  a=4, b=5
    printf( " Sum of %d and %d is %d.\n " ,a,b, a+b);
    printf( " Difference of %d and %d is %d.\n" , a,b, a-b);
    return 0;

 }
```

Output :

Sum of 4 and 5 is 9.
Difference of 4 and 5 is -1.