

Bitwise Operators : Bitwise operators in c are & , | , << , >> , ~ , ^ .

1. The **& (bitwise AND)** in C takes two numbers as operands and does AND on every bit of two numbers. The result of AND is 1 only if both bits are 1.
2. The **| (bitwise OR)** in C or C++ takes two numbers as operands and does OR on every bit of two numbers. The result of OR is 1 if any of the two bits is 1.
3. The **^ (bitwise XOR)** in C or C++ takes two numbers as operands and does XOR on every bit of two numbers. The result of XOR is 1 if the two bits are different.
4. The **<< (left shift)** in C or C++ takes two numbers, left shifts the bits of the first operand, the second operand decides the number of places to shift.
5. The **>> (right shift)** in C or C++ takes two numbers, right shifts the bits of the first operand, the second operand decides the number of places to shift.
6. The **~ (bitwise NOT)** in C or C++ takes one number and inverts all bits of it

Ternary Operator (?:) in C

The conditional operator is kind of similar to the **if-else statement** as it does follow the same algorithm as of **if-else statement** but the conditional operator takes less space and helps to write the if-else statements in the shortest way possible.

```
variable = Expression1 ? Expression2 : Expression3
```

It can be visualized into if-else statement as:

```
if(Expression1)
{
    variable = Expression2;
}
else
{
    variable = Expression3;
}
```