

# Comparison Operator

Comparison operators are operators used for comparing two elements, these are mostly used with if-else conditions as they return true-false as result.

**There are mainly 6 Comparison Operators namely:**

1. **Greater than (>) :** this operator checks whether operand1 is greater than operand2. If the result turns out to be true, it returns true or else returns false. example `5>3` ->returns true
2. **Greater than or equal to (>=) :** this operator checks whether operand1 is greater than or equal to operand2. If the result turns out to be true, it returns true or else returns false. example `5>=5` ->returns true
3. **Less than (<) :** this operator checks whether operand1 is lesser than operand2. If the result turns out to be true, it returns true or else returns false. example `3<5` ->returns true
4. **Less than or equal to (<=) :** this operator checks whether operand1 is lesser than or equal to operand2. If the result turns out to be true, it returns true or else returns false. example `5<=5` ->returns true
5. **Equal to (==) :** this operator checks whether operand1 is equal to operand2. If the result turns out to be true, it returns true or else returns false. example `5==5` ->returns true
6. **Not Equal to (!=) :** this operator checks whether operand1 is not equal to operand2. If the result turns out to be true, it returns true or else returns false. example `5!=3` ->returns true

Comparison Operators have only two return values, either true (1) or False (0).

**Example Code to cover all 6 Comparison Operators:**

```
#include<iostream>
using namespace std;
int main()
{
    int x = 10, y = 20 ;
    cout << (x<y) << "\n"
         << (x>y) << "\n"
         << (x==y) << "\n"
         << (x>=y) << "\n"
         << (x<=y) << "\n"
```

```
        << (x!=y) << "\n";  
    return 0;  
}
```

## Output

```
1  
0  
0  
0  
1  
1
```