Compare the two object that contains integer values that demonstrate the overloading of equality (==), less than (<), greater than (>), not equal (!=),greater than or equal to (>=) and less than or equal to(<=) operators.

```
#include <iostream>
#define SUCCESS 0
using namespace std;
class Integer
{
 private:
  int no;
 public:
  Integer(int a):no(a){};
  bool operator==(Integer a)
  {
    if(a.no == no)
      return true;
    else
      return false;
  }
  bool operator<(Integer a)
  {
  if(no < a.no)
      return true;
    else
      return false;
  }
bool operator>(Integer a)
  {
  if(no > a.no)
      return true;
    else
      return false;
  }
bool operator<=(Integer a)
  {
  if(no <= a.no)
      return true;
    else
      return false;
```

```
 }
bool operator>=(Integer a)
 {
 if(no >= a.no)
    return true;
   else
    return false;
 }
};
int main()
{
 int temp;
 cout << "Enter integer for object a";
 cin >> temp;
 Integer a(temp);
 cout << "Enter integer for object b";
 cin >> temp;
 Integer b(temp);
 if (a == b)
  cout << "object a and b are equal"<< endl;
 if (a < b)
  cout << "object a is less than b"<< endl;
 if (a > b)
  cout << "object a is greater than b"<< endl;
 if (a <= b)
  cout << "object a is less than or equal to b"<< endl;
 if (a >= b)
  cout << "object a is gerater than or equal to b"<< endl;
 return SUCCESS;
}

#include<iostream>//or
using namespace std;
class op
{
   int num;
public:
   op(int i)
   {
      num=i;
```

```
}
void operator == (op o2)
{
   cout<<"For "<<num<<" == "<<o2.num<<endl;
   if(num==o2.num)
   {
      cout<<"True"<<endl;
   }
   else
   {
      cout<<"False"<<endl;
   }
}
void operator < (op o2)
{
   cout<<"For "<<num<<" < "<<o2.num<<endl;
   if(num<o2.num)
   {
      cout<<"True"<<endl;
   }
   else
   {
      cout<<"False"<<endl;
   }
}
void operator > (op o2)
{
   cout<<"For "<<num<<" > "<<o2.num<<endl;
   if(num>o2.num)
   {
      cout<<"True"<<endl;
   }
   else
   {
      cout<<"False"<<endl;
   }
}
void operator != (op o2)
{
   cout<<"For "<<num<<" != "<<o2.num<<endl;
```

```
        if(num!=o2.num)
        {
            cout<<"True"<<endl;
        }
        else
        {
            cout<<"False"<<endl;
        }
    }
    void operator >= (op o2)
    {
        cout<<"For "<<num<<" >= "<<o2.num<<endl;
        if(num>=o2.num)
        {
            cout<<"True"<<endl;
        }
        else
        {
            cout<<"False"<<endl;
        }
    }
    void operator <= (op o2)
    {
        cout<<"For "<<num<<" <= "<<o2.num<<endl;
        if(num<=o2.num)
        {
            cout<<"True"<<endl;
        }
        else
        {
            cout<<"False"<<endl;
        }
    }
};
int main()
{
    op o1(1),o2(2);
    o1==o2;
    o1>o2;
    o1<o2;
```

```
    o1!=o2;
    o1>=o2;
    o1<=o2;
}
```