

NAME : Saddam Barkat

Roll # 221698

```
#include <iostream>
using namespace std;
```

```
class Point
{
```

```
    private:
```

```
        int x, y;
```

```
    public:
```

```
        Point()
```

```
        {
```

```
            x=0;
```

```
            y=0;
```

```
        }
```

```
        Point(int a, int b)
```

```
        {
```

```
            x=a;
```

```
            y=b;
```

```
        }
```

```
        void setdata(int a, int b)
```

```
        {
```

```
            x=a;
```

```
            y=b;
```

```
        }
```



```
int getx ( )
{
    return x;
}
```

```
int gety ( )
{
    return y;
}
```

```
void input ( )
{
    cout << "Enter value x:";
    cin >> x;
    cout << "Enter value y:";
    cin >> y;
}
```

```
void output (void)
{
    cout << "x : " << x << endl;
    cout << "y : " << y << endl;
}
```

```
Point operator ++ ( ) // pre-increment
{
    :
    x++;
    y++;
}
```

```
Point operator ++ (int) // post-increment
{
    x++ , y++;
}
```



```
Point operator -- ( //pre-D
```

```
{  
    x--, y--;  
}
```

```
Point operator -- (int) //post-D
```

```
{  
    x--, y--;  
}
```

```
Point operator +(Point obj)
```

```
{  
    Point temp;  
    temp.x = x + obj.x;  
    temp.y = y + obj.y; return temp;  
}
```

```
Point operator - (Point obj)
```

```
{  
    Point temp;  
    temp.x = x - obj.x;  
    temp.y = y - obj.y;  
    return temp;  
}
```

```
Point operator * (Point obj)
```

```
{  
    Point temp;  
    temp.x = x * obj.x;  
    temp.y = y * obj.y;  
    return temp;  
}
```



```
Point operator / (Point obj)
{
```

```
    Point temp;
    temp.x = x / obj.x;
    temp.y = y / obj.y;
    return temp;
}
```

```
Point operator += (Point obj)
{
```

```
    x = x + obj.x;
    y = y + obj.y;
}
```

```
Point operator -= (Point obj)
{
```

```
    x = x - obj.x;
    y = y - obj.y;
}
```

```
Point operator *= (Point obj)
{
```

```
    x = x * obj.x;
    y = y * obj.y;
}
```

```
Point operator /= (Point obj)
{
```

```
    x = x / obj.x;
    y = y / obj.y;
}
```



```
bool operator < (point obj)
{
    if (x < obj.x & y < obj.y)
    {
        return true;
    }
    else
    {
        return return false;
    }
}
```

```
bool operator > (point obj)
{
    if (x > obj.x & y > obj.y)
    {
        return true;
    }
    else
    {
        return false;
    }
}
```

```
bool operator <= (point obj)
{
    if (x <= obj.x & y <= obj.y)
```



```

    {
        return true;
    }
    else
    {
        return false;
    }
}

```

```

bool operator >=(Point obj)
{
    if (x >= obj.x & y >= obj.y)
    {
        return true;
    }
    else
    {
        return false;
    }
}

```

```

bool operator !=(Point obj)
{
    if (x != obj.x & y != obj.y)
    {
        return true;
    }
    else { return false; }
}

```



```
bool operator == (Point obj)
{
    if (x == obj.x & y == obj.y)
    {
        return true;
    }
    else
    {
        return false;
    }
}
```

```
};
```

```
int main ( ) {
```

```
    return 0;
}
```

---