

Qn1: WAP to add two complex number (a+ib) using operator overloading.

Code:

```
#include<iostream>
using namespace std;
class Complex{
int real,imag;
public:
    Complex(int r=0, int i=0){
        real=r;
        imag=i;
    }
    Complex operator+(Complex c){
        Complex temp;
        temp.real=real+c.real;
        temp.imag=imag+c.imag;
        return temp;
    }
    void display(){
        cout<<"Result:"<<real<<"+"<<imag<<"i"<<endl;
    }
};

int main(){
    int x,y,a,b;
    cout<<"Enter the first real and imaginary number:";
    cin>>x>>y;
    cout<<"Enter the second real and imaginary number:";
    cin>>a>>b;

    Complex c1(x,y),c2(a,b),result;
    result=c1+c2;
    result.display();
}
```

Output:

```
Enter the first real and imaginary number:5
7
Enter the second real and imaginary number:4
7
Result:9+14i
```

Qn2: Increment using ++ overload

Code:

```
#include<iostream>

using namespace std;
```

```

class Number{
private:
    int value;
public:
    Number(int val=0):value(val){}
    Number operator++(){
        Number temp;
        temp.value=++value;
        return temp;
    }
    void display()const{
        cout<<"Value:"<<value<<endl;
    }
};

int main(){
    int n;
    cout<<"Enter the value:";
    cin>>n;
    Number num(n);
    cout<<"Original value:";
    num.display();
    ++num;
    cout<<"After ++num:";
    num.display();
    Number num2=++num;
    cout<<"After num2=++num."<<endl;
    num2.display();
    return 0;
}

```

Output:

```
Enter the value:8
Original value:Value:8
After ++num:Value:9
After num2=++num.
Value:10
```