

```

#include <iostream>
using namespace std;
class complex{
public:
    double real,img;
    complex()
    {
        real=0;
        img=0;
    }
    complex(double r, double i)
    {
        real = r;
        img = i;
    }
    void display();
    complex operator + (complex &obj)
    {
        complex ans;
        ans.real = this->real + obj.real;
        ans.img = this->img + obj.img;
        return ans;
    }
    complex operator - (complex &obj)
    {
        complex ans;
        ans.real = this->real - obj.real;
        ans.img = this->img - obj.img;
        return ans;
    }
    complex operator * (complex &c1)
    {
        complex ans;
        ans.real = this->real * c1.real - this->img * c1.img;
        ans.img = this->real * c1.img + this->img * c1.real;
        return ans;
    }
    complex operator / (complex &c1)
    {
        complex ans;
        int deno = c1.real*c1.real + c1.img*c1.img;
        ans.real = (real*c1.real + img*c1.img)/deno;
        ans.img = (img*c1.real - real*c1.img)/deno;

        return ans;
    }
}

```

```

};
void complex::display()
{
    cout<<"("<<real<<"+"<<img<<"i"<<")";
}
int main(){
    char yesno;
    do{
        int real, img;
        cout<<"enter real part n1:"<<endl;
        cin>>real;
        cout<<"enter imaginary part n1:"<<endl;
        cin>>img;
        complex n1(real,img);
        cout<<"enter real part n2:"<<endl;
        cin>>real;
        cout<<"enter imaginary part of n2:"<<endl;
        cin>>img;
        complex n2(real, img);
        char op;
        cout<<"enter operator";
        cin>>op;
        switch(op){
            case '+':
                n1.display(); cout<<"+"; n2.display(); cout<<"=";
                (n1+n2).display();
                break;
            case '-':
                n1.display(); cout<<"-"; n2.display(); cout<<"="; (n1-
n2).display();
                break;
            case '*':
                n1.display(); cout<<"*"; n2.display(); cout<<"=";
                (n1*n2).display();break;
            case '/':
                n1.display(); cout<<"/"; n2.display(); cout<<"=";
                (n1/n2).display();break;

        }
        cout<<"Do you want to continue(y/n):";
        cin>>yesno;

    }
    while(yesno == 'y');
}

```