stream>

using namespace std;

class complex

{

int real,imag;

public:

void read()

{

cout<<"Enter real part and imag part:";

cin>>real>>imag;

}

void display()

{

cout<<real<<"+"<<imag<<"i\n";

}

complex operator + (complex c2)

{

complex c3;

c3.real=real+c2.real;

c3.imag=imag+c2.imag;

return c3;

}

complex operator \* (complex c2)

{

complex c3;

c3.real=(real\*c2.real)+(imag\*c2.imag);

c3.imag=(real\*c2.imag)+(c2.real\*imag);

return c3;

}

friend istream& operator>>(istream& is,complex& c);

friend ostream& operator<<(ostream& os,complex c);

};

istream& operator>>(istream& is,complex &c)

{

is>>c.real>>c.imag;

}

ostream& operator<<(ostream& os,complex c)

{

os<<c.real<<"+"<<c.imag<<"i\n";

}

int main()

{

complex c1,c2,c3;

char choice;

int ch;

do{

cout<<"\n1.read \n2.display \n3.add \n4.multiply";

cout<<"\nenter your choice:";

cin>>ch;

switch(ch)

{

case 1: cout<<"Enter 1st Complex no.:";

cin>>c1;

cout<<"Enter 2nd Complex no.:";

cin>>c2;

break;

case 2: cout<<c1;

cout<<c2;

break;

case 3: c3=c1+c2;

cout<<"\ncomplex number 1:";

c1.display();

cout<<"\ncomplex number 2:";

c2.display();

cout<<"\nAdded complex number is:";

c3.display();

break;

case 4: c3=c1\*c2;

cout<<"\ncomplex number 1:";

c1.display();

cout<<"\ncomplex number 2:";

c2.display();

cout<<"\nAdded complex number is:";

c3.display();

}

cout<<"\ndo you want to continue (y/n):";

cin>>choice;

}while(choice=='y');

return 0;

}