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#include<iostream>

using namespace std;

class com

{

float re;

float im;

public:

friend ostream & operator << (ostream &out, const com &c);

friend istream & operator >> (istream &in, com &c);

com()

{

re=0;

im=0;

}

com operator +(com c2)

{

com tem;

tem.re=re + c2.re;

tem.im=im + c2.im;

return tem;

}

com operator \*(com c2)

{

com te;

te.re=(re \* c2.re) - (im \* c2.im);

te.im=(re \* c2.im) + (c2.re \* im) ;

return te;

}

void op()

{

if(im<0)

cout<<"Complex Number: "<<re<<im<<"i\n";

else

cout<<"Complex Number: "<<re<<"+"<<im<<"i\n";

}

};

ostream & operator << (ostream &out, const com &c)

{

out << c.re;

out << "+" << c.im <<"i"<< endl;

return out;

}

istream & operator >> (istream &in, com &c)

{

cout << "Enter Real Part \n";

in >> c.re;

cout << "Enter Imaginary Part \n";

in >> c.im;

return in;

}

int main()

{

com c1,c2,ad,mu;

cout<<"Enter first complex number:\n";

cin>> c1;

cout<<"Enter second complex number:\n";

cin>>c2;

cout<<"Addition Gives: \n";

ad=c1 + c2;

cout<<ad;

cout<<"Multiplication gives: \n";

mu=c1 \* c2;

cout<<mu;

return 0;

}