EXP N0:-7

IMPLIMENT COMPLEX NUMBER CLASS

ALGORITHM**:**

Step 1: Start

Step 2: Declare and define class “COMPLES” with public functions “get” which reads the real and imaginary parts, “display” which prints the complex number and “add” which calculates additions of the complex numbers.

Step 3: Read the 1st and 2nd Complex Number as real and imaginary part.

Step 4: call “get” function.

Step 5: call “display” function to display the complex numbers.

Step 6: call “add” function to add the Complex Numbers.

Step 7: Print the Resultant Complex Number.

Step 8: Stop

CODE:

#include<iostream>

using namespace std;

class Complex{ //declaring class real and imaginary numbers

private :

int re,im;

public :

void getdata() //defining function taking values from user

{

cout<<"Enter the first complex number :"<<endl;

cin>>re;

cin>>im;

}

void showdata() //defining function to show the display data

{

cout<<re<<"+"<<im<<"i"<<endl;

}

void add(Complex c1,Complex c2) //defining function to add the complex number

{

re=c1.re+c2.re;

im=c1.im+c2.im;

}

};

int main() //main function

{

Complex c1,c2,c3;

c1.getdata(); //calling get data function

cout<<"The first complex number is : "<<endl;

c1.showdata(); //calling display data function

c2.getdata(); //calling get data function

cout<<"The second complex number is : "<<endl;

c2.showdata(); //calling display data function

c3.add(c1,c2); //adding the complex numbers

cout<<"The sum of two complex numbers is :"<<endl;

c3.showdata(); //calling display data function

}

OUTPUT:-

