Experiment-8

Aim : Write a program to perform addition of two complex numbers using constructor overloading. The first constructor which takes no argument is used to create objects which are not initialized, second which takes one argument is used to initialize real and imag parts to equal values and third which takes two argument is used to initialized real and imag to two different values.

**Source Code:**

#include <iostream>

using namespace std;

class Complex{

public:

int real;

int img;

Complex(){

real = 0;

img = 0;

}

Complex(int r, int i){

real = r;

img = i;

}

void sum(Complex C1, Complex C2){

Complex C3;

C3.real = C1.real + C2.real;

C3.img = C1.img + C2.img;

cout<<"Result of X+Y = "<<C3.real<<" + "<<C3.img<<"i"<<endl;

}

};

int main()

{

int real, img;

cout<<"First complex no.: ";

cin>>real>>img;

Complex C1(real,img);

cout<<"Second complex no.: ";

cin>>real>>img;

Complex C2(real,img);

cout<<"X = "<<C1.real<<" + "<<C1.img<<"i"<<endl;

cout<<"Y = "<<C2.real<<" + "<<C2.img<<"i"<<endl;

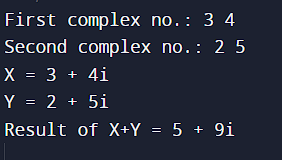
Complex C3;

C3.sum(C1, C2);

return 0;

}

**OUTPUT:**



Experiment-7

Aim - Write a program to find the greatest of two given numbers in two different classes using friend function.

**Source Code:**

#include <iostream>

using namespace std;

class Second;

class First{

private:

int x;

public:

void input(){

cout<<"First no.: ";

cin>>x;

}

friend void check(First, Second);

};

class Second{

private:

int y;

public:

void input(){

cout<<"Second no.: ";

cin>>y;

}

friend void check(First, Second);

};

void check(First n1, Second n2){

if(n1.x>n2.y){

cout<<"Greater of two is: "<<n1.x;

} else {

cout<<"Greater of two is: "<<n2.y;

}

}

int main()

{

First num1;

Second num2;

num1.input();

num2.input();

check(num1, num2);

return 0;

}

**OUTPUT:**

