**Practical No.:-** 1

**Name:** Sattyam Sagar Chavan, AI&DS-B4 batch, Roll no: 73

**Input :-**

#include<iostream>

using namespace std;

class complex

{

float x;

float y;

public:

complex()

{

x=0;

y=0;

}

complex operator +(complex);

complex operator \*(complex);

friend istream &operator >>(istream &input,complex &t)

{

cout<<"Enter the real part = ";

input>>t.x;

cout<<"Enter the imaginary part = ";

input>>t.y;

}

friend ostream &operator <<(ostream &output,complex &t)

{

output<<t.x<<"+"<<t.y<<"i\n";

}

};

complex complex::operator +(complex c)

{

complex temp;

temp.x=x+c.x;

temp.y=y+c.y;

return(temp);

}

complex complex::operator \*(complex c)

{

complex temp2;

temp2.x=(x\*c.x)-(y\*c.y);

temp2.y=(y\*c.x)+(x\*c.y);

return (temp2);

}

int main()

{

cout<<"Name : Sattyam Sagar Chavan , Class : SE , Batch : B4 , Roll no. : 73 \nOUTPUT:\n";

complex c1,c2,c3,c4;

cout<<"Default constructor value = \n";

cout<<c1;

cout<<"\nEnter the 1st number : \n";

cin>>c1;

cout<<"\nEnter the 2nd number : \n";

cin>>c2;

c3=c1+c2;

c4=c1\*c2;

cout<<"\nThe first number is : ";

cout<<c1;

cout<<"\nThe second number is : ";

cout<<c2;

cout<<"\nThe addition is : ";

cout<<c3;

cout<<"\nThe multiplication is : ";

cout<<c4;

return 0;

}

**Output :**

