**Practical: 10 Create a class 'COMPLEX' to hold a complex number. Write a friend function to add two complex numbers. Write a main function to add two COMPLEX objects.**

#include<iostream>

using namespace std;

class COMPLEX

{ int r,i;

public:

COMPLEX(){}

COMPLEX(int a,int b);

friend COMPLEX func(COMPLEX c1,COMPLEX c2);

void display();

};

COMPLEX :: COMPLEX(int a,int b)

{ r=a;

i=b;

}

COMPLEX func(COMPLEX c1,COMPLEX c2)

{ COMPLEX c;

c.r=c1.r+c2.r;

c.i=c1.i+c2.i;

return c;

}

void COMPLEX :: display()

{

cout<<" Number :";

cout<<r;

if(i>0)

cout<<"+";

cout<<i<<"i";

}

int main()

{ COMPLEX c1(3,4),c2(6,-9),c3;

cout<<"\n Number 1 : ";

c1.display();

cout<<"\n Number 2 : ";

c2.display();

cout<<"\n Addition of two numbers : ";

c3=func(c1,c2);

c3.display();

return 0;

}

**OUTPUT 10**

