

**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;
}

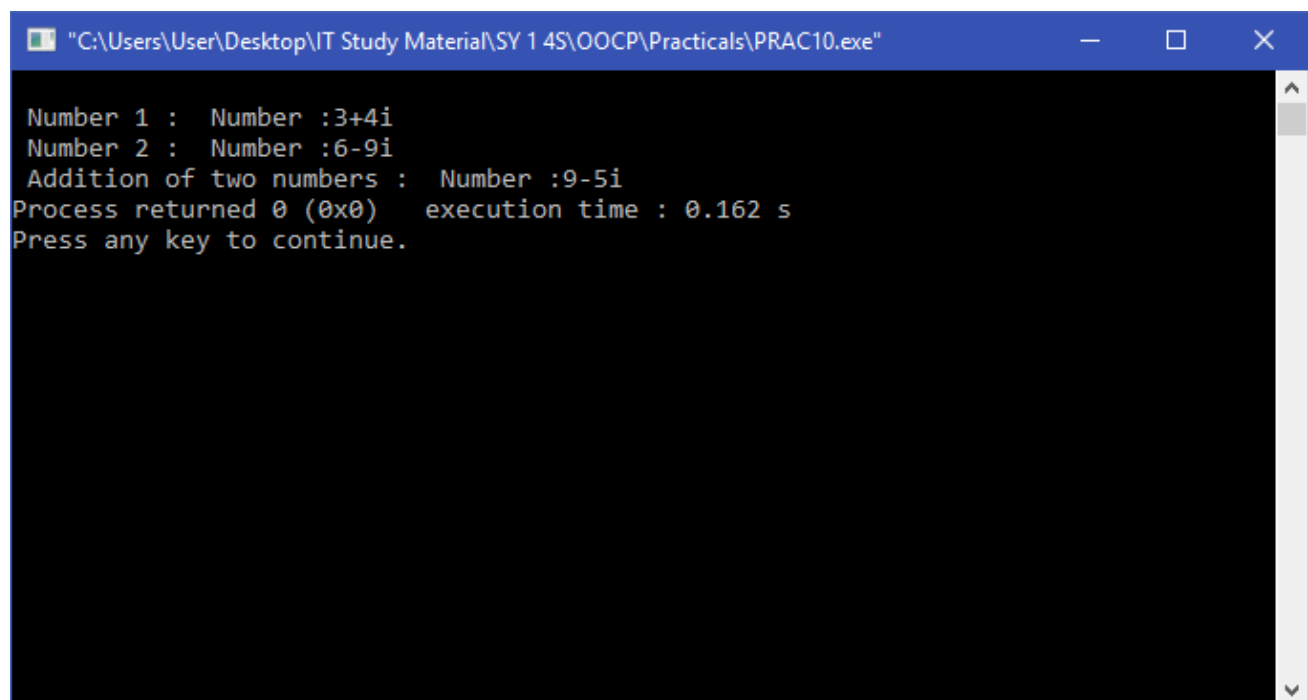
void COMPLEX :: display()
{
    cout<<" Number :";
    cout<<r;
    if(i>0)
        cout<<"+";
```

```
        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



```
"C:\Users\User\Desktop\IT Study Material\SY 1 45\OOCp\Practicals\PRAC10.exe"

Number 1 : Number :3+4i
Number 2 : Number :6-9i
Addition of two numbers : Number :9-5i
Process returned 0 (0x0) execution time : 0.162 s
Press any key to continue.
```