

Experiment 7

ALGORITHM

Step 1: Start

Step 2: Declare and define class“COMPLES” withpublic 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:-

```
//addition two complex number
#include<iostream>
using namespace std;
class COMPLEX                                //create class of name cmplex
{
    int re,im;
public:
    void get()                                //function to read the input
    {
        cin>>re>>im;
```

```

    }

    void display()                                //function to display output
    {
        cout<<re<<" "<<im<<"i";
    }
    void add(COMPLEX c1,COMPLEX c2)                //function to add two numbers
    {
        re=c1.re+c2.re;
        im=c1.im+c2.im;
    }
};//complex

int main()
{
    COMPLEX c1,c2,c3;                            //instantiation of objects
    cout<<"\nenter 1st complex no. as real and imaginary part:";
    c1.get();
    cout<<"\nenter 2nd complex no. as real and imaginary part:";
    c2.get();
    cout<<"\n\n the 1st complex no is:";
    c1.display();
    cout<<"\n\n the 2nd complex no is:";
    c2.display();

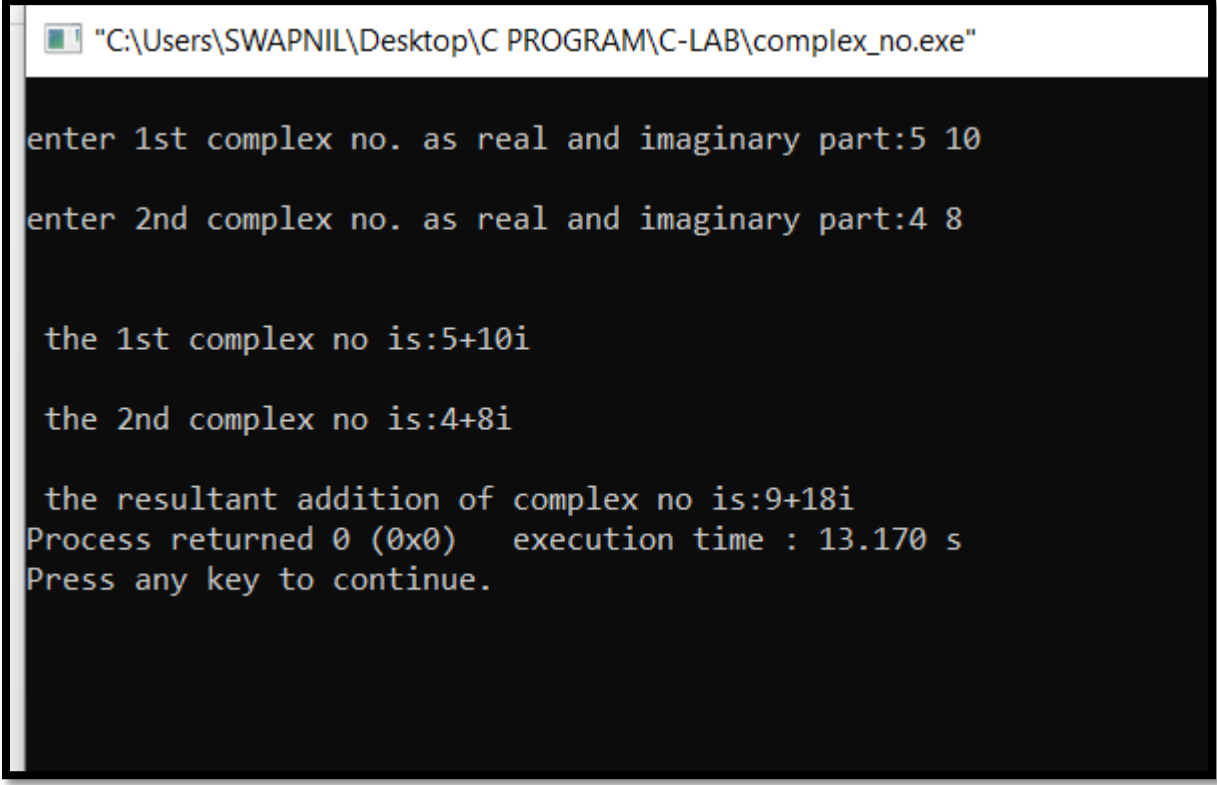
    c3.add(c1,c2);

```

```
cout<<"\n\n the resultant complex no is:";
c3.display();

return 0;
}
```

Output:-



```
"C:\Users\SWAPNIL\Desktop\C PROGRAM\C-LAB\complex_no.exe"

enter 1st complex no. as real and imaginary part:5 10
enter 2nd complex no. as real and imaginary part:4 8

the 1st complex no is:5+10i
the 2nd complex no is:4+8i

the resultant addition of complex no is:9+18i
Process returned 0 (0x0)   execution time : 13.170 s
Press any key to continue.
```