Practical 06 (22001212)

01)

main.cpp

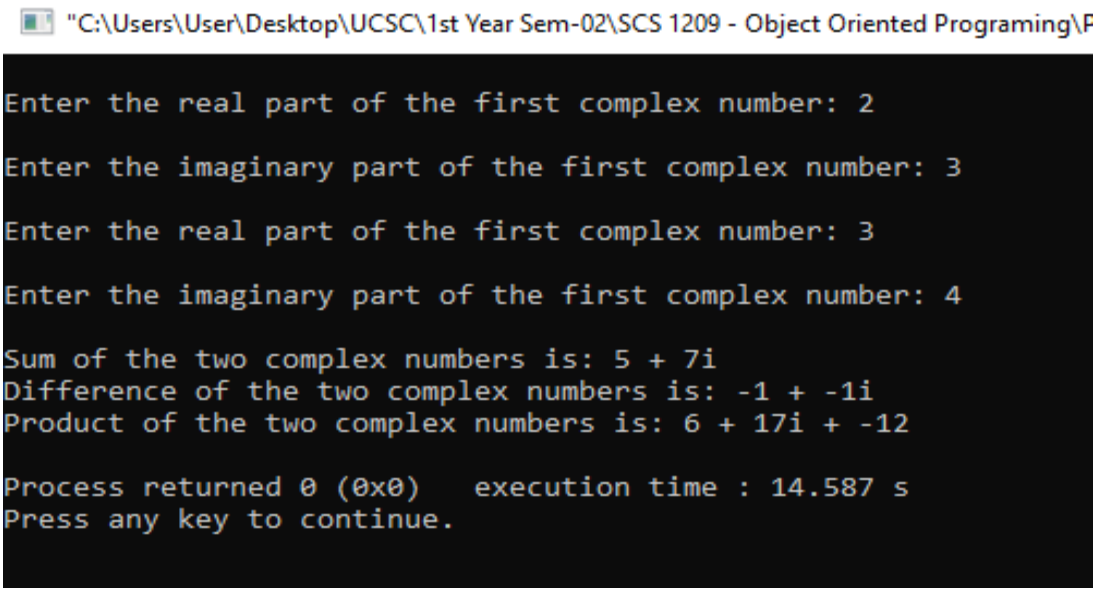
```cpp
#include <iostream>

using namespace std;

int main()
{
    //Question No 1
    int n,sum=0,suml=0;
    cout<<"\nEnter the value for n to get sum of the positive integers :";
    cin>>n;
    while(n>0){
        sum=sum+n;
        n--;
    }
    cout<<"\nSum is :"<<sum<<endl;

    cout<<"\nEnter the value for n to get sum of the positive integers :";
    cin>>n;
    do{
        suml=suml+n;
        n--;
    }while(n>0);
    cout<<"\nSum is :"<<suml<<endl;


    return 0;
}
```

```
"C:\Users\User\Desktop\UCSC\1st Year Sem-02\SCS 1209 - Object Oriented Programing\Pra

Enter the value for n to get sum of the positive integers :5

Sum is :15

Enter the value for n to get sum of the positive integers :4

Sum is :10

Process returned 0 (0x0)   execution time : 14.361 s
Press any key to continue.
```

02)

main.cpp

```cpp
#include <iostream>

using namespace std;

class Complex{
public:
    int realPart;
    int imaginaryPart;

    Complex(int r,int i){
        realPart=r;
        imaginaryPart=i;
    }

    void addComplex(Complex c1,Complex c2){
        int r,i;
        r=c1.realPart+c2.realPart;
        i=c1.imaginaryPart+c2.imaginaryPart;
        cout<<"\nSum of the two complex numbers is: "<<r<<" + "<<i<<"i";
    }

    void substractComplex(Complex c1,Complex c2){
        int r,i;
        r=c1.realPart-c2.realPart;
        i=c1.imaginaryPart-c2.imaginaryPart;
        cout<<"\nDifference of the two complex numbers is: "<<r<<" + "<<i<<"i";
    }

    void multiplyComplex(Complex c1,Complex c2){
        int r,i;
        r=c1.realPart*c2.realPart;
        i=(c1.imaginaryPart*c2.imaginaryPart)*(-1);
        cout<<"\nProduct of the two complex numbers is: "<<r<<" + "<<(c1.realPart*c2.imaginaryPart)+(c1.imaginaryPart*c2.realPart
    }

int main()
{
    int r1,i1,r2,i2;
    cout<<"\nEnter the real part of the first complex number: ";
    cin>>r1;
    cout<<"\nEnter the imaginary part of the first complex number: ";
    cin>>i1;
    cout<<"\nEnter the real part of the first complex number: ";
    cin>>r2;
    cout<<"\nEnter the imaginary part of the first complex number: ";
    cin>>i2;
    Complex C1=Complex(r1,i1);
    Complex C2=Complex(r2,i2);
    Complex C3=Complex(0,0);
    C3.addComplex(C1,C2);
    C3.substractComplex(C1,C2);
    C3.multiplyComplex(C1,C2);
    cout<<"\n";
```



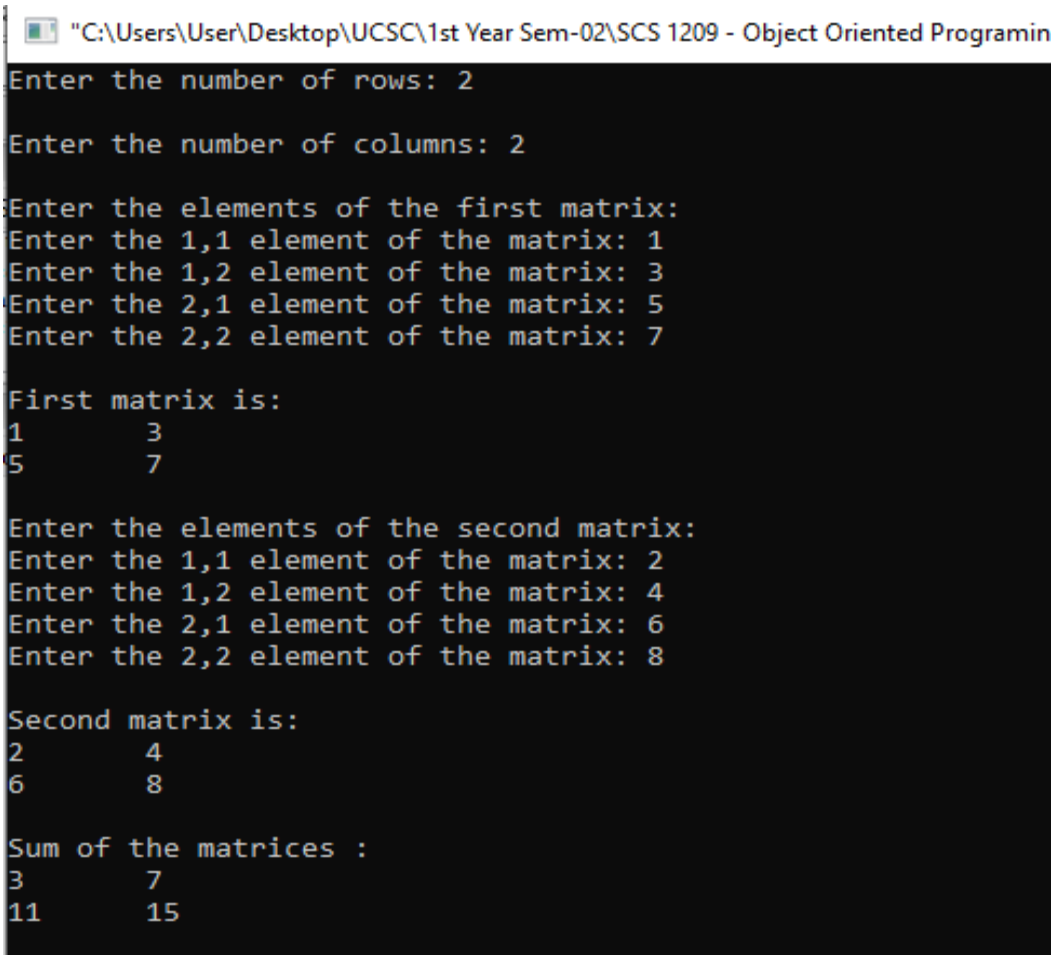
03)

main.cpp

```cpp
#include <iostream>

using namespace std;

int main()
{
    //Question No 03
    int r,c,m1[10][10],m2[10][10];
    cout<<"\nEnter the number of rows: ";
    cin>>r;
    cout<<"\nEnter the number of columns: ";
    cin>>c;
    cout<<"\nEnter the elements of the first matrix:"<<endl;
    for(int i=1;i<=r;i++){
        for(int j=1;j<=c;j++){
            cout<<"Enter the "<<i<<","<<j<<" element of the matrix: ";
            cin>>m1[i][j];
```

```
    }
    cout<<"\nFirst matrix is:"<<endl;
    for(int i=1;i<=r;i++){
        for(int j=1;j<=c;j++){
            cout<<m1[i][j]<<"\t";
        }
        cout<<"\n";
    }

    cout<<"\nEnter the elements of the second matrix:"<<endl;
    for(int i=1;i<=r;i++){
        for(int j=1;j<=c;j++){
            cout<<"Enter the "<<i<<","<<j<<" element of the matrix: ";
            cin>>m2[i][j];
        }
    }
    cout<<"\nSecond matrix is:"<<endl;
```

```
    for(int i=1;i<=r;i++){
        for(int j=1;j<=c;j++){
            cout<<m2[i][j]<<"\t";
        }
        cout<<"\n";
    }

    cout<<"\nSum of the matrices : "<<endl;
    for(int i=1;i<=r;i++){
        for(int j=1;j<=c;j++){
            cout<<m1[i][j]+m2[i][j]<<"\t";
        }
        cout<<"\n";
    }

    return 0;
}
```



04)

```
1   #include <iostream>
2
3   using namespace std;
4
5   class Volume{
6   public:
7       float length;
8       float breadth;
9       float height;
10
11      Volume(float l,float b,float h){
12          length=l;
13          breadth=b;
14          height=h;
15      }
16  };
17
```

05)

```
18  class Employee{
19      string name;
20      float salary;
21      int hoursPerDay;
22  public:
23      void setName(string Name){
24          name=Name;
25      }
26      string getName(){
27          return name;
28      }
29      void setSalary(float Salary){
30          salary=Salary;
31      }
32      float getSalary(){
33          return salary;
34      }
```

```
35      void setHoursPerDay(int hpd){
36          hoursPerDay=hpd;
37      }
38      int getHoursPerDay(){
39          return hoursPerDay;
40      }
41
42      Employee(string Name,float Salary,int hpd){
43          name=Name;
44          salary=Salary;
45          hoursPerDay=hpd;
46      }
47
48      void AddSal(){
49          if(salary<500){
50              salary=salary+10;
51          }
```

```
52              cout<<salary;
53      }
54      void AddWork(){
55          if(hoursPerDay<6){
56              salary=salary+5;
57          }
58          cout<<salary;
59      }
60  };
61
62  int main()
63  {
64      Employee el=("John",450,4);
65      cout<<"\nSalary of "<<el.name;
66      el.AddSal();
67      el.AddWork();
68
69      return 0;
```