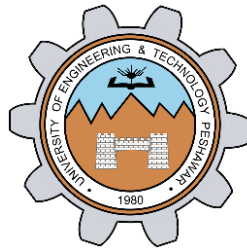


# **“PROGRAMING TASKS”**

## **LAB # 10**



**Spring 2020**

### **CSE102L Computer Programming Lab**

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“On my honor, as student of University of Engineering and Technology, I have neither given nor received unauthorized assistance on this academic work.”

Submitted to:

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(August ,9, 2020)

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**1. A phone number such is (091) 767-8900 can be thought of as having three parts: the area code (091), exchange (767) and number 8900. Write a program that uses structure to store these 3 parts of a phone number separately. Assume name of the structure is 'phone'. Create two objects of type 'phone', initialize one object and take the other one from the user. Display both numbers.**

**Sample Run:**

**Enter you Area code, exchange, and number: 091 767 8900**

**My number is (042) 867-4982**

**Your number is (091) 767-8900**

**Code :-**

```
#include<iostream>

using namespace std;

struct phone{

int code;

int exchange;

int number;

};

main(){

phone x;

x={{(071),243, 987};
```

```
x.code=(071);  
x.exchange=243;  
x.number=987;
```

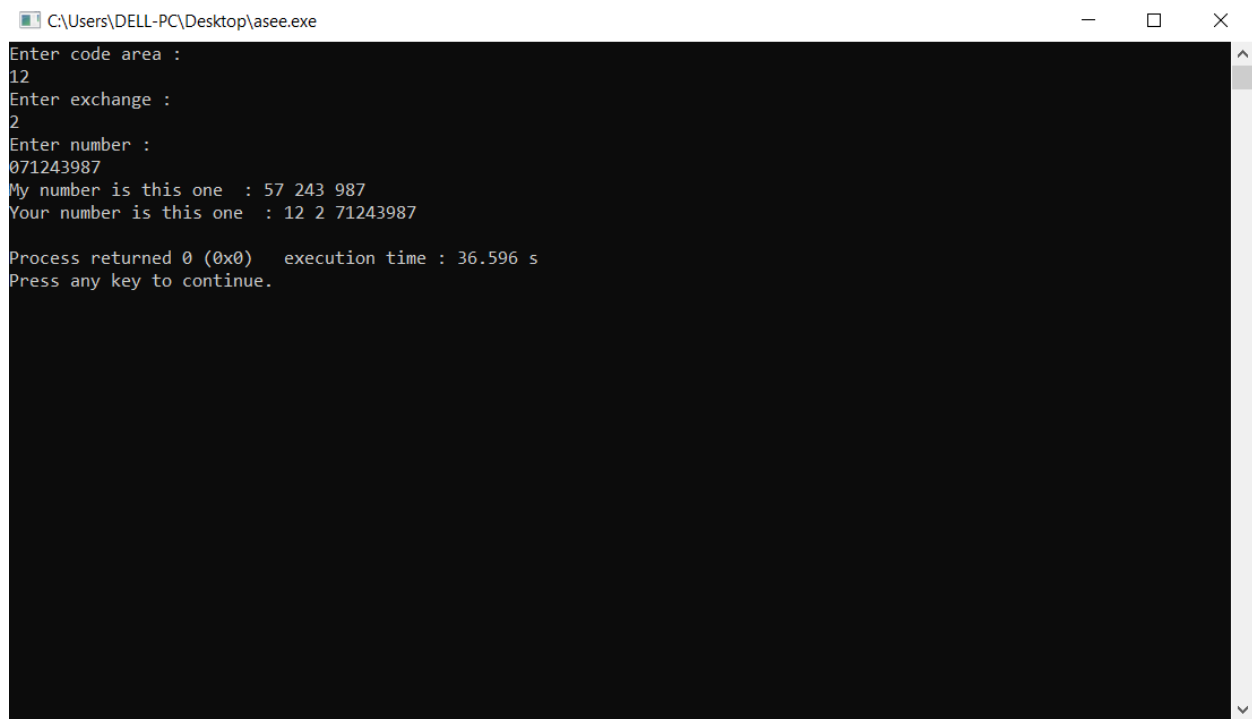
```
phone y;  
y.code;  
y.exchange;  
y.number;
```

```
cout<<"Enter code area : "<<endl;  
cin>>y.code;  
cout<<"Enter exchange : "<<endl;  
cin>>y.exchange;  
cout<<"Enter number : "<<endl;  
cin>>y.number;
```

```
cout<<"My number is this one : ";  
cout<<x.code<<" "<<x.exchange<<" "<<x.number<<endl;
```

```
cout<<"Your number is this one : ";  
cout<<y.code<<" "<<y.exchange<<" "<<y.number<<endl;
```

```
}
```



```
C:\Users\DELL-PC\Desktop\asee.exe
Enter code area :
12
Enter exchange :
2
Enter number :
071243987
My number is this one : 57 243 987
Your number is this one : 12 2 71243987

Process returned 0 (0x0)   execution time : 36.596 s
Press any key to continue.
```

**2. Write a C++ Program where you create a movie database using structures. i.e the struct must have two members “title” and “year”. For test run add 3 movies into the database and then display the move title and names.**

**Code :-**

```
#include<iostream>

using namespace std;
```

```
struct movies{
```

```
    string title ;
```

```
    int year;
```

```
};
```

```
main(){
```

```
    movies x[3];
```

```
    for (int i=0; i<3; i++){
```

```
        cout<<"Enter movie name :"<<endl;
```

```
        cin>>x[i].title;
```

```
        cout<<" Enter the year of the movie :"<<endl;
```

```
        cin>>x[i].year;
```

```
        cout<<"\n\n";
```

```
    }
```

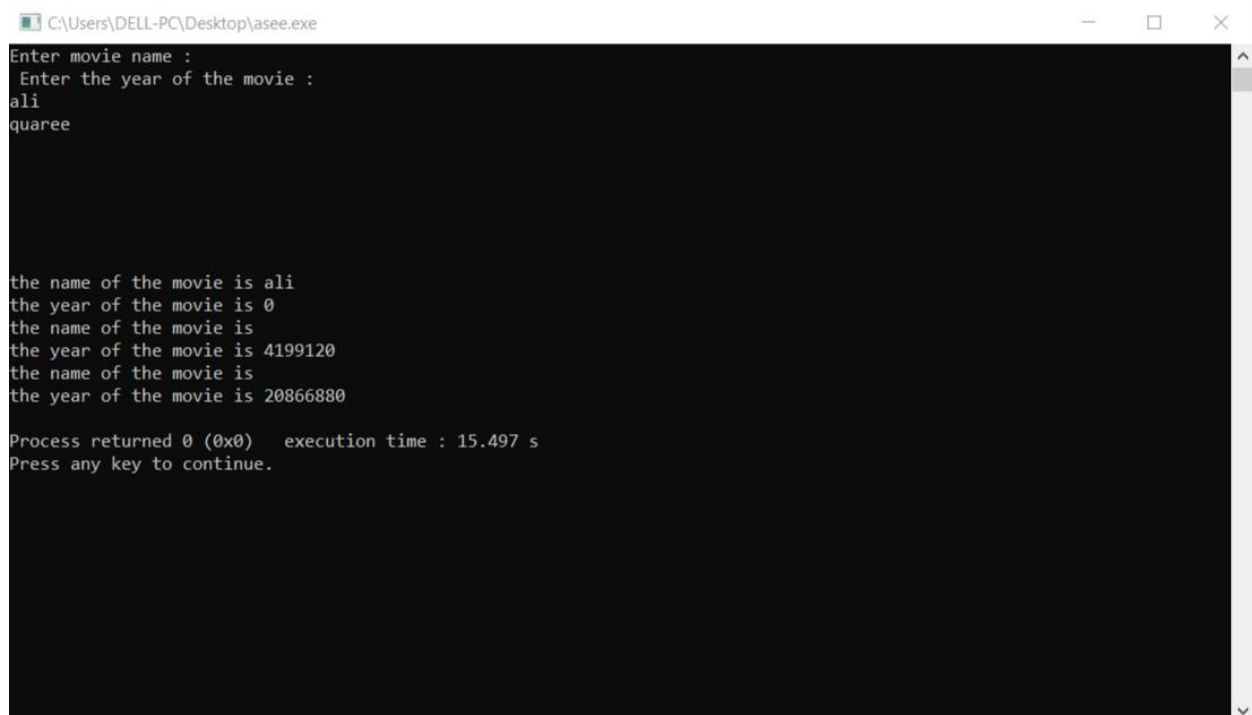
```
    for (int i=0 ; i<3; i++)
```

```

{
    cout<<"the name of the movie is "<<x[i].title<<endl;
    cout<<"the year of the movie is "<<x[i].year<<endl;

}
}

```



```

C:\Users\DELL-PC\Desktop\asee.exe
Enter movie name :
Enter the year of the movie :
ali
quaree

the name of the movie is ali
the year of the movie is 0
the name of the movie is
the year of the movie is 4199120
the name of the movie is
the year of the movie is 20866880

Process returned 0 (0x0)   execution time : 15.497 s
Press any key to continue.

```

**3. A point on a two dimensional space has two numbers: an ‘X’ coordinate and a ‘Y’**

coordinate such as (4, 5). Write a program that uses a structure called 'point' to model a

point and draw a rectangle of '\*' based on the entered height and width of the rectangle.

**Sample Run:**

**Enter the point coordinates: (x, y)**

**3 2**

**Enter width of the rectangle: 3**

**Enter Height of the rectangle: 2**

**\* \* \***

**\* \* \***

**Code :-**

```
#include<iostream>
```

```
using namespace std;
```

```
struct point{
```

```
int height ;
```

```
int width;
```

```
};
```

```
main (){
```

```
point x;
```

```
cout<<"Enter width of rectangle :"<<endl;
cin>>x.width;
cout<<"Enter height of rectangle :"<<endl;
cin>>x.height;
```

```
cout<<"\nThe width of rectangle is :"<<x.width<<endl;
cout<<"The height of rectangle is :"<<x.height<<endl;
cout<<"\nRectangle is ....\n"<<endl;
for (int i=1; i<=x.height; i++)
{
    for (int i=1; i<=x.width; i++){
        cout<<" * ";
    }
    cout<<endl;
}

}
```



```
C:\Users\DELL-PC\Desktop\asee.exe
Enter width of rectangle :
4
Enter height of rectangle :
5
The width of rectangle is :4
The height of rectangle is :5
Rectangle is ....
* * * *
* * * *
* * * *
* * * *
* * * *
Process returned 0 (0x0)   execution time : 13.142 s
Press any key to continue.
```

**4. Write a program to develop student information system. This system should be able to take the student's credentials, like name, reg no and semester no, as input and store them in a structure object Student\_t. The system should be capable of storing the information of multiple students. And it should be capable of displaying the student's information, when asked to do so, via reg no.**

**Code :-**

```
#include<iostream>
using namespace std;
```

```
struct student{
string name;
string Regno ;
int semester;
string dept;
};
```

```
main(){
student x[4];
```

```
for (int i=0; i<4; i++){
    cout<<"Enter name of the student:"<<endl;
    cin>>x[i].name;
    cout<<" Enter the registration number of the student :"<<endl;
    cin>>x[i].Regno;
    cout<<"Enter student's semester number :"<<endl;
    cin>>x[i].semester;
    cout<<"Enter student's department name :"<<endl;
```

```
cin>>x[i].dept;
```

```
cout<<"\n\n";
```

```
}
```

```
string y;
```

```
cout<<"which student information you want ,Enter his reg.no :\n ";
```

```
cin>>y;
```

```
if (y==x[0].Regno){
```

```
    cout<<"Name = "<<x[0].name<<endl;
```

```
    cout<<"Semester no = "<<x[0].semester<<endl;
```

```
    cout<<"Department = "<<x[0].dept<<endl;
```

```
}
```

```
else if (y==x[1].Regno){
```

```
    cout<<"Name = "<<x[1].name<<endl;
```

```
    cout<<"Semester no = "<<x[1].semester<<endl;
```

```
    cout<<"Department = "<<x[1].dept<<endl;
```

```
}
```

```
else if (y==x[2].Regno){
```

```
    cout<<"Name = "<<x[2].name<<endl;
```

```
    cout<<"Semester no = "<<x[2].semester<<endl;
```

```
    cout<<"Department = "<<x[2].dept<<endl;
```

```
}
```

```

else if (y==x[3].Regno){

    cout<<"Name = "<<x[3].name<<endl;

    cout<<"Semester no = "<<x[3].semester<<endl;

    cout<<"Department = "<<x[3].dept<<endl;

}

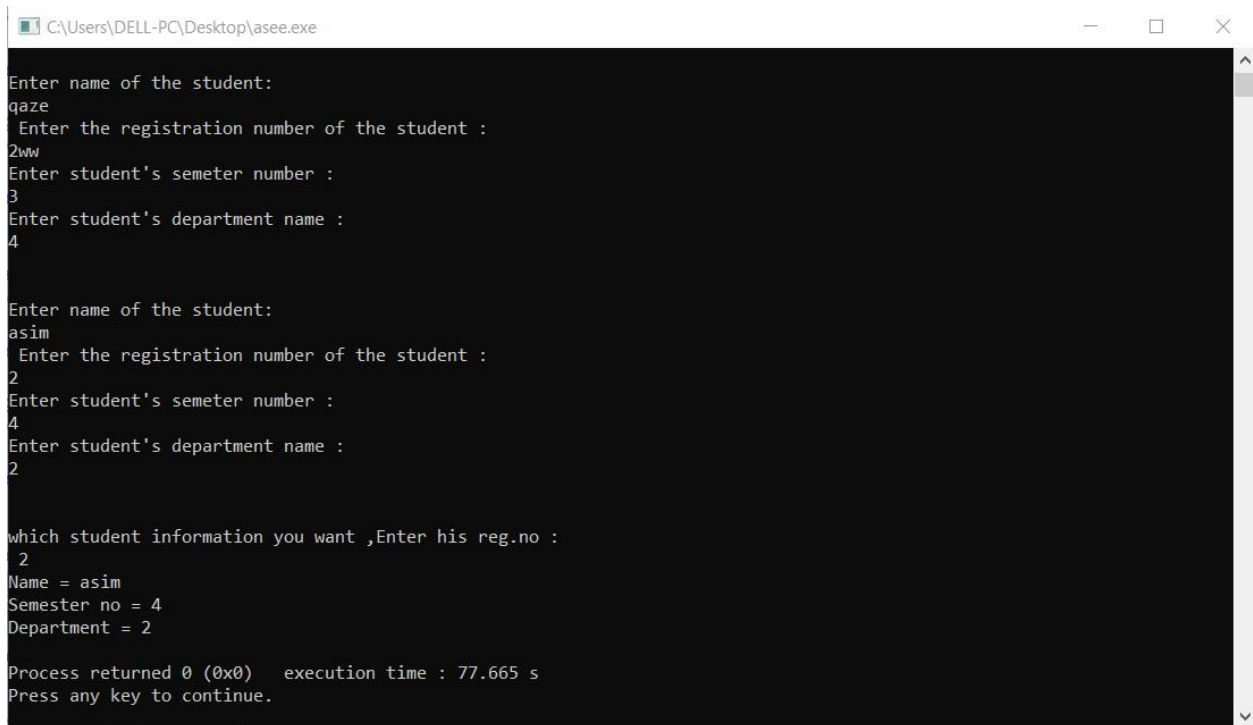
else {

    cout<<"No record found";

}

}

```



```

C:\Users\DELL-PC\Desktop\asee.exe
Enter name of the student:
qaze
Enter the registration number of the student :
2ww
Enter student's semeter number :
3
Enter student's department name :
4

Enter name of the student:
asim
Enter the registration number of the student :
2
Enter student's semeter number :
4
Enter student's department name :
2

which student information you want ,Enter his reg.no :
2
Name = asim
Semester no = 4
Department = 2

Process returned 0 (0x0)   execution time : 77.665 s
Press any key to continue.

```