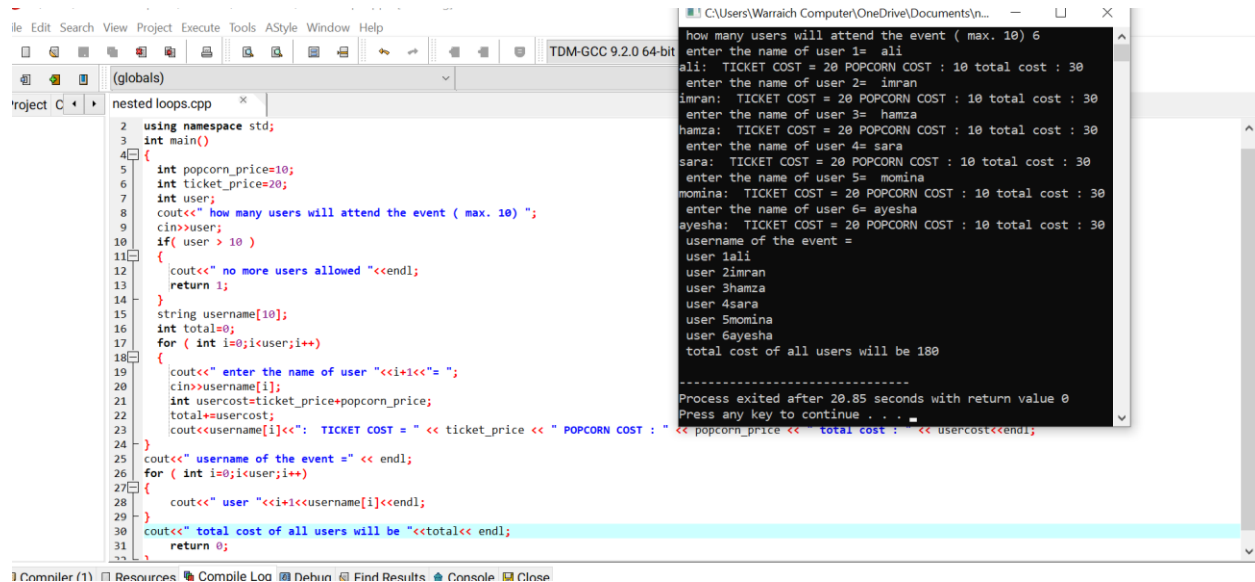


PROGRAMMING FUNDAMENTAL

LAB TASK 9

Q1



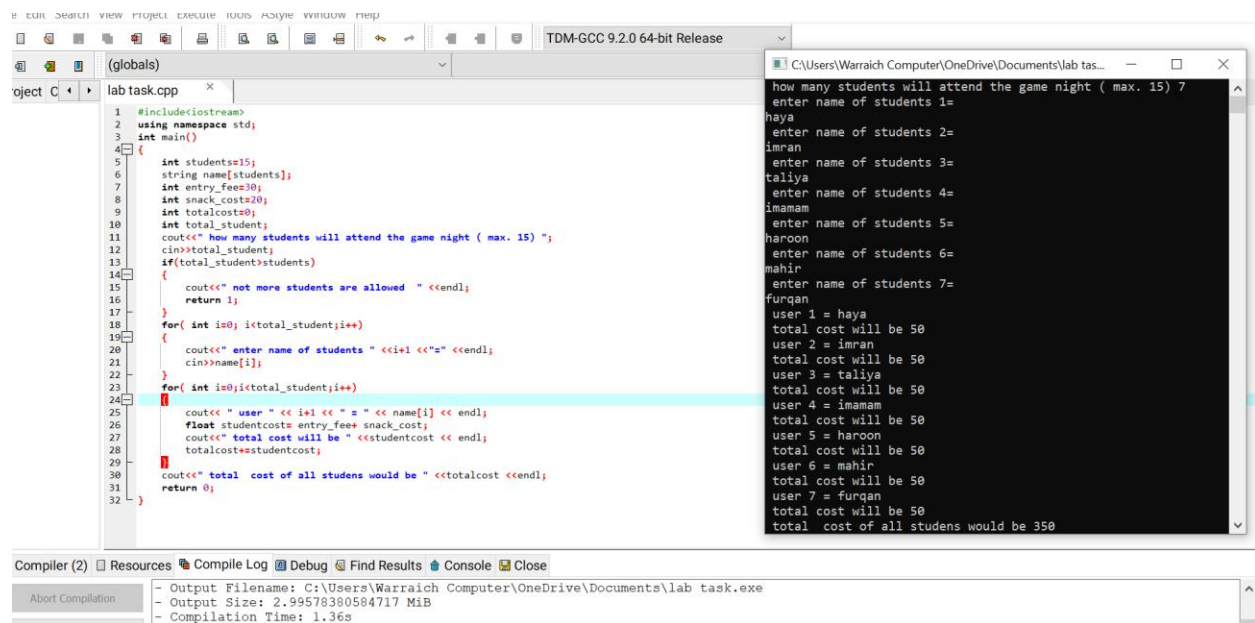
The screenshot shows a C++ IDE with the file 'nested loops.cpp'. The code calculates the total cost for users attending an event. It prompts for the number of users (max 10), then for each user's name, ticket price (20), and popcorn cost (10). The total cost is calculated and displayed at the end.

```
1 using namespace std;
2 int main()
3 {
4     int popcorn_price=10;
5     int ticket_price=20;
6     int user;
7     cout<<" how many users will attend the event ( max. 10) ";
8     cin>>user;
9     if( user > 10 )
10    {
11        cout<<" no more users allowed "<<endl;
12        return 1;
13    }
14    string username[10];
15    int total=0;
16    for ( int i=0;i<user;i++)
17    {
18        cout<<" enter the name of user "<<i+1<<" = ";
19        cin>>username[i];
20        int usercost=ticket_price+popcorn_price;
21        total+=usercost;
22        cout<<username[i]<<": TICKET COST = " << ticket_price << " POPCORN COST : " << popcorn_price << " total cost : " << usercost<<endl;
23    }
24    cout<<" username of the event = " <<endl;
25    for ( int i=0;i<user;i++)
26    {
27        cout<<" user "<<i+1<<username[i]<<endl;
28    }
29    cout<<" total cost of all users will be "<<total<<endl;
30    return 0;
31 }
```

The output window shows the following execution:

```
how many users will attend the event ( max. 10) 6
enter the name of user 1= ali
ali: TICKET COST = 20 POPCORN COST : 10 total cost : 30
enter the name of user 2= imran
imran: TICKET COST = 20 POPCORN COST : 10 total cost : 30
enter the name of user 3= hamza
hamza: TICKET COST = 20 POPCORN COST : 10 total cost : 30
enter the name of user 4= sara
sara: TICKET COST = 20 POPCORN COST : 10 total cost : 30
enter the name of user 5= momina
momina: TICKET COST = 20 POPCORN COST : 10 total cost : 30
enter the name of user 6= ayesha
ayesha: TICKET COST = 20 POPCORN COST : 10 total cost : 30
username of the event =
user 1ali
user 2imran
user 3hamza
user 4sara
user 5momina
user 6ayesha
total cost of all users will be 180
Process exited after 20.85 seconds with return value 0
Press any key to continue . . .
```

Q2



The screenshot shows a C++ IDE with the file 'lab task.cpp'. The code calculates the total cost for students attending a game night. It prompts for the number of students (max 15), then for each student's name, entry fee (30), and snack cost (20). The total cost is calculated and displayed at the end.

```
1 #include<iostream>
2 using namespace std;
3 int main()
4 {
5     int students=15;
6     string name[students];
7     int entry_fee=30;
8     int snack_cost=20;
9     int totalcost=0;
10    int total_students;
11    cout<<" how many students will attend the game night ( max. 15) ";
12    cin>>total_students;
13    if(total_students>students)
14    {
15        cout<<" not more students are allowed " <<endl;
16        return 1;
17    }
18    for( int i=0; i<total_students;i++)
19    {
20        cout<<" enter name of students " <<i+1 <<" = " <<endl;
21        cin>>name[i];
22    }
23    for( int i=0;i<total_students;i++)
24    {
25        cout<<" user " << i+1 << " = " << name[i] << endl;
26        float studentcost= entry_fee+ snack_cost;
27        cout<<" total cost will be " <<studentcost <<endl;
28        totalcost+=studentcost;
29    }
30    cout<<" total cost of all students would be " <<totalcost <<endl;
31    return 0;
32 }
```

The output window shows the following execution:

```
how many students will attend the game night ( max. 15) 7
enter name of students 1= haya
haya
enter name of students 2= imran
imran
enter name of students 3= taliya
taliya
enter name of students 4= imamam
imamam
enter name of students 5= haroon
haroon
enter name of students 6= mahir
mahir
enter name of students 7= furqan
furqan
user 1 = haya
total cost will be 50
user 2 = imran
total cost will be 50
user 3 = taliya
total cost will be 50
user 4 = imamam
total cost will be 50
user 5 = haroon
total cost will be 50
user 6 = mahir
total cost will be 50
user 7 = furqan
total cost will be 50
total cost of all students would be 350
```

The Compiler window shows the following information:

```
Compiler (2) Resources Compile Log Debug Find Results Console Close
Output Filename: C:\Users\Warrach Computer\OneDrive\Documents\lab task.exe
Output Size: 2.99578380584717 MiB
Compilation Time: 1.36s
```