

Name: zoha wasim

Sap id: 65341

Task#1

The screenshot shows a C++ IDE with a file named 'Untitled1.cpp'. The code defines a program to calculate the total cost for users attending an event. It sets a maximum of 10 users, a ticket price of 150.0, and a popcorn price of 50.0. The program prompts the user for the number of attendees and then for each user's name. The execution output shows 7 users: ZUBIA, AYESHA, HAYA, AIMAN, JOHN, HAYAT, and YOUSAF, with a total cost of 1400 PKR.

```
1 #include<iostream>
2 using namespace std;
3 int main()
4 {
5     const int MAX_USERS = 10;
6     string names[MAX_USERS];
7     float ticketPrice = 150.0;
8     float popcornPrice = 50.0;
9     float totalCost = 0.0;
10    int numUsers;
11    cout << "How many users attend the event? (Maximum 10): ";
12    cin >> numUsers;
13
14
15    if (numUsers > MAX_USERS) {
16        cout << "Error: Not more users allowed." << endl;
17        return 1;
18    }
19
20    for (int i = 0; i < numUsers; i++) {
21        cout << "Enter name for user " << (i + 1) << ": ";
22        cin >> names[i];
23    }
24 }
```

Execution Output:

```
How many users attend the event? (Maximum 10): 7
Enter name for user 1: ZUBIA
Enter name for user 2: AYESHA
Enter name for user 3: HAYA
Enter name for user 4: AIMAN
Enter name for user 5: JOHN
Enter name for user 6: HAYAT
Enter name for user 7: YOUSAF
User names for the event:
User 1: ZUBIA
Total cost for ZUBIA: 200 PKR
User 2: AYESHA
Total cost for AYESHA: 200 PKR
User 3: HAYA
Total cost for HAYA: 200 PKR
User 4: AIMAN
Total cost for AIMAN: 200 PKR
User 5: JOHN
Total cost for JOHN: 200 PKR
User 6: HAYAT
Total cost for HAYAT: 200 PKR
User 7: YOUSAF
Total cost for YOUSAF: 200 PKR
Total cost for all users: 1400 PKR
```

The screenshot shows the continuation of the C++ code in 'Untitled1.cpp'. It calculates the total cost for each user by adding the ticket price and popcorn price, and then prints the total cost for all users. The execution output shows the total cost for all users as 1400 PKR.

```
22    cout << "Enter name for user " << (i + 1) << ": ";
23    cin >> names[i];
24 }
25
26
27    cout << "User names for the event:" << endl;
28    for (int i = 0; i < numUsers; i++) {
29        cout << "User " << (i + 1) << ": " << names[i] << endl;
30
31        float userCost = ticketPrice + popcornPrice;
32        cout << "Total cost for " << names[i] << ": " << userCost << " PKR" << endl;
33
34        totalCost += userCost;
35    }
36
37    cout << "Total cost for all users: " << totalCost << " PKR" << endl;
38
39    return 0;
40 }
```

Execution Output:

```
User names for the event:
User 1: ZUBIA
Total cost for ZUBIA: 200 PKR
User 2: AYESHA
Total cost for AYESHA: 200 PKR
User 3: HAYA
Total cost for HAYA: 200 PKR
User 4: AIMAN
Total cost for AIMAN: 200 PKR
User 5: JOHN
Total cost for JOHN: 200 PKR
User 6: HAYAT
Total cost for HAYAT: 200 PKR
User 7: YOUSAF
Total cost for YOUSAF: 200 PKR
Total cost for all users: 1400 PKR
```

Task#2

```

1 #include<iostream>
2 using namespace std;
3 int main()
4 {
5     const int MAX_STUDENTS = 15;
6     string names[MAX_STUDENTS];
7     float entryFee = 100.0;
8     float snackCost = 50.0;
9     float totalCost = 0.0;
10
11     int numStudents;
12
13     cout << "How many students will attend the game night? (Max: 15)";
14     cin >> numStudents;
15
16     if (numStudents > MAX_STUDENTS) {
17         cout << "Error: Not more students allowed." << endl;
18         return 1;
19     }
20     for (int i = 0; i < numStudents; i++) {
21         cout << "Enter name for student " << (i + 1) << ": ";
22         cin >> names[i];
23     }
24     cout << "User names for the event:" << endl;

```

Console Output:

```

How many students will attend the game night? (Max: 15)
Enter name for student 1:
SALAR
Enter name for student 2:
HASHIM
Enter name for student 3:
JIHAN
Enter name for student 4:
YARAM
Enter name for student 5:
UMER
User names for the event:
User 1: SALAR
Total cost for SALAR: 150 PKR
User 2: HASHIM
Total cost for HASHIM: 150 PKR
User 3: JIHAN
Total cost for JIHAN: 150 PKR
User 4: YARAM
Total cost for YARAM: 150 PKR
User 5: UMER

```

```

14     cin >> numStudents;
15
16     if (numStudents > MAX_STUDENTS) {
17         cout << "Error: Not more students allowed." << endl;
18         return 1;
19     }
20     for (int i = 0; i < numStudents; i++) {
21         cout << "Enter name for student " << (i + 1) << ": ";
22         cin >> names[i];
23     }
24     cout << "User names for the event:" << endl;
25     for (int i = 0; i < numStudents; i++) {
26         cout << "User " << (i + 1) << ": " << names[i] << endl;
27
28         float studentCost = entryFee + snackCost;
29         cout << "Total cost for " << names[i] << ": " << studentCost << " PKR" << endl;
30         totalCost += studentCost;
31     }
32     cout << "Total cost for all students: " << totalCost << " PKR" << endl;
33
34     return 0;
35 }

```

Console Output:

```

User 1: SALAR
Total cost for SALAR: 150 PKR
User 2: HASHIM
Total cost for HASHIM: 150 PKR
User 3: JIHAN
Total cost for JIHAN: 150 PKR
User 4: YARAM
Total cost for YARAM: 150 PKR
User 5: UMER
Total cost for all students: 750 PKR

```