Assignment No: 01

Name: Dnyaneshwari Thombal
Class: SY-1
Batch: C
PRN: B25CE2005

Title: Rainfall Tracking:
Write a program to track rainfall data for 3 cities over 4 months. Using a 2D array, we can store the data, calculate the average rainfall for each city, and display the rainfall data in a tabular format.

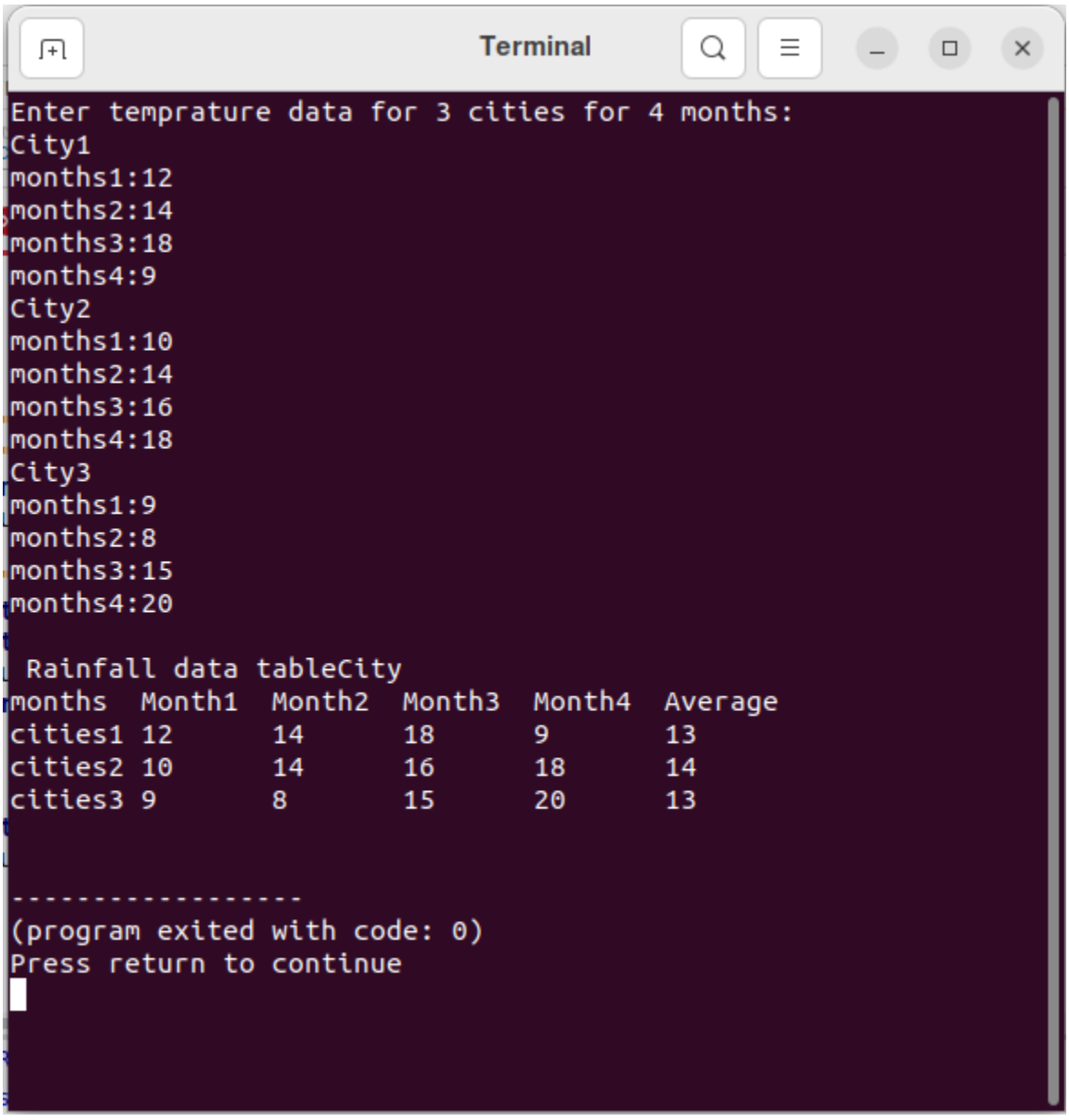
Program:

```
#include <iostream>
using namespace std;
int main(){
   int cities=3;
   int months=4;
   int Rainfall [cities][months];

   cout<<"Enter temperature data for 3 cities for 4 months:\n";
   for (int i =0;i<3;i++){
                    cout<<"City"<<i+1<<"\n";
                    for(int j=0;j<4;j++){
                             cout<<"months"<<j+1<<":";
                             cin>>Rainfall[i][j];
                    }
          }
  cout<<"\n Rainfall data table";
  cout<<"City\nmonths\t";
  for (int j=0;j<4;j++){
           cout<<"Month"<<j+1<<"\t";
           }
  cout<<"Average\n";
  for(int i=0;i<3;i++){
           int sum=0;
           cout<<"cities"<<i+1<<"\t";
           for(int j=0;j<4;j++){
                    cout<<Rainfall[i][j]<<"\t";
                    sum+=Rainfall[i][j];
           }
```

```
            int average=sum/months;
            cout<<average<<endl;
 }
 return 0;
}
```

Output:



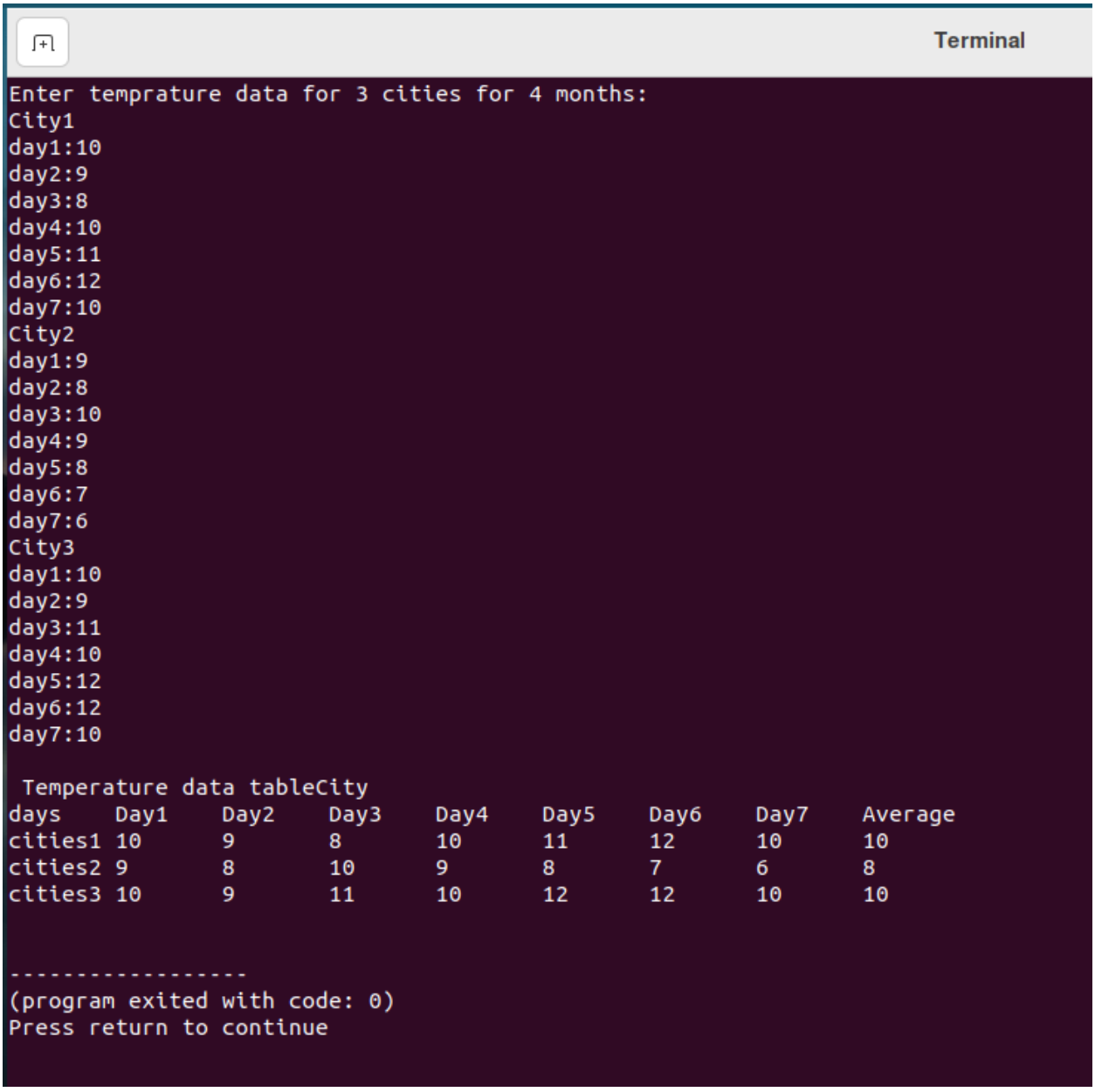
Title: Temperature Tracker:
Write a program for Tracking daily temperatures of 3 cities for a week. The program calculates the average temperature for each day and for the week.

Program:

```
#include <iostream>
using namespace std;
int main(){
   int cities=3;
   int days=7;
   int temperature [cities][days];

   cout<<"Enter temperature data for 3 cities for 4 months:\n";
   for (int i =0;i<3;i++){
                    cout<<"City"<<i+1<<"\n";
                    for(int j=0;j<7;j++){
                              cout<<"day"<<j+1<<":";
                              cin>>temperature[i][j];
                    }
          }
 cout<<"\n Temperature data table";
 cout<<"City\ndays\t";
 for (int j=0;j< 7;j++){
           cout<<"Day"<<j+1<<"\t";
          }
 cout<<"Average\n";
 for(int i=0;i<3;i++){
           int sum=0;
           cout<<"cities"<<i+1<<"\t";
           for(int j=0;j<7;j++){
                     cout<<temperature[i][j]<<"\t";
                     sum+=temperature[i][j];
           }
           int average=sum/days;
           cout<<average<<endl;
 }
 return 0;
}
```

Output:


Terminal
Enter temprature data for 3 cities for 4 months:
City1
day1:10
day2:9
day3:8
day4:10
day5:11
day6:12
day7:10
City2
day1:9
day2:8
day3:10
day4:9
day5:8
day6:7
day7:6
City3
day1:10
day2:9
day3:11
day4:10
day5:12
day6:12
day7:10
Temperature data tableCity
days Day1 Day2 Day3 Day4 Day5 Day6 Day7 Average
cities1 10 9 8 10 11 12 10 10
cities2 9 8 10 9 8 7 6 8
cities3 10 9 11 10 12 12 10 10
(program exited with code: 0)
Press return to continue