CODE 1:

```
/*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.
*/
#include<stdio.h>
int main(){
float rainfall[3][4];
float total=0.0, avg=0.0;
for (int i=0;i<3;i++){
for(int j=0;j<4;j++){
printf("Enter value for city %d month %d:",i+1,j+1);
scanf("%f",&rainfall[i][j]);
}
}
printf("\t\t\t\t\tRainfall Tracking B24CE1076\n");
printf("SR_NO\tCITY\tMONTH 1\t\tMONTH 2\t\tMONTH 3\t\tMONTH 4\t\tAVG");
printf("\n-----------------------------------------------------------------------------------------\n");
for (int i=0;i<3;i++){
printf("%d\t",i+1);
printf("CITY %d\t",i+1);
for(int j=0;j<4;j++){
printf("%f\t",rainfall[i][j]);
total+=rainfall[i][j];
}
avg=total/4;
printf("%f",avg);
printf("\n-----------------------------------------------------------------------------------------\n");

total=0.0;
}

}
```

OUTPUT 1:

```
Enter value for city 1 month 1:150
Enter value for city 1 month 2:300
Enter value for city 1 month 3:250
Enter value for city 1 month 4:200
Enter value for city 2 month 1:170
Enter value for city 2 month 2:280
Enter value for city 2 month 3:310
Enter value for city 2 month 4:250
Enter value for city 3 month 1:160
Enter value for city 3 month 2:180
Enter value for city 3 month 3:190
Enter value for city 3 month 4:250
                                    Rainfall Tracking B24CE1076
SR_NO   CITY    MONTH 1         MONTH 2         MONTH 3         MONTH 4         AVG
-------------------------------------------------------------------------------------
1       CITY 1  150.000000      300.000000      250.000000      200.000000      225.000000
-------------------------------------------------------------------------------------
2       CITY 2  170.000000      280.000000      310.000000      250.000000      252.500000
-------------------------------------------------------------------------------------
3       CITY 3  160.000000      180.000000      190.000000      250.000000      195.000000
-------------------------------------------------------------------------------------


-----------------
(program exited with code: 0)
Press return to continue
```

CODE 2:

```
#include <stdio.h>
int main() {
    int temp[3][7];
    // Input temperatures
    for (int i = 0; i < 3; i++) {
        for (int j = 0; j < 7; j++) {
            printf("Enter B24CE1076 the temp for City %d for Day %d:", i + 1, j + 1);
            scanf("%d", &temp[i][j]);
        }
    }
    // B24CE1076 printing the temperature report
    printf("\n---------- Temperature Report ----------\n");
    printf("Day\tCity1\tCity2\tCity3\tAverage\n");
    printf("-------------------------------------------------------\n");

    for (int j = 0; j < 7; j++) {
        float day_sum = 0;
        printf("%d\t\t", j + 1);
        for (int i = 0; i < 3; i++) {
            printf("%d\t\t", temp[i][j]);
            day_sum += temp[i][j];
        }
        float day_avg = day_sum / 3;
        printf("%.2f\n", day_avg);
    }
    // B24CE1076 printing the weekly average per city
    printf("\n---------- Weekly Average per City ----------\n");
    printf("City\tAverage\n");
    printf("-------------------------\n");
    for (int i = 0; i < 3; i++) {
        float city_sum = 0;
        for (int j = 0; j < 7; j++) {
            city_sum += temp[i][j];
        }
        float city_avg = city_sum / 7;
        printf("City%d\t%.2f\n", i + 1, city_avg);
    }
    return 0;
}
```

OUTPUT 2:

```
Enter B24CE1076 the temp for City 1 for Day 1:32
Enter B24CE1076 the temp for City 1 for Day 2:31
Enter B24CE1076 the temp for City 1 for Day 3:33
Enter B24CE1076 the temp for City 1 for Day 4:32
Enter B24CE1076 the temp for City 1 for Day 5:34
Enter B24CE1076 the temp for City 1 for Day 6:29
Enter B24CE1076 the temp for City 1 for Day 7:27
Enter B24CE1076 the temp for City 2 for Day 1:42
Enter B24CE1076 the temp for City 2 for Day 2:41
Enter B24CE1076 the temp for City 2 for Day 3:43
Enter B24CE1076 the temp for City 2 for Day 4:45
Enter B24CE1076 the temp for City 2 for Day 5:40
Enter B24CE1076 the temp for City 2 for Day 6:42
Enter B24CE1076 the temp for City 2 for Day 7:43
Enter B24CE1076 the temp for City 3 for Day 1:16
Enter B24CE1076 the temp for City 3 for Day 2:15
Enter B24CE1076 the temp for City 3 for Day 3:17
Enter B24CE1076 the temp for City 3 for Day 4:21
Enter B24CE1076 the temp for City 3 for Day 5:22
Enter B24CE1076 the temp for City 3 for Day 6:19
Enter B24CE1076 the temp for City 3 for Day 7:20

------------------ Temperature Report ------------------
Day City1   City2   City3   Average
--------------------------------------------------------
1       32      42      16      30.00
2       31      41      15      29.00
3       33      43      17      31.00
4       32      45      21      32.67
5       34      40      22      32.00
6       29      42      19      30.00
7       27      43      20      30.00

---------------- Weekly Average per City ----------------
City    Average
---------------------------
City1   31.14
City2   42.29
City3   18.57
```