

```

1  #include <iostream>
2  #include <iomanip>
3  #include <cstdlib>
4  #include <ctime>
5
6  using namespace std;
7
8  const int Month = 12;
9  const int Temp = 2;
10
11 int getData(int [][]Temp, int, int);
12 int averageHigh(int [][]Temp, int, int);
13 int averageLow(int [][]Temp, int, int);
14 int indexHighTemp(int [][]Temp, int, int);
15 int indexLowTemp(int [][]Temp, int, int);
16
17 int main() {
18     srand(time(0));
19     int Data[Month][Temp] = {};
20     getData(Data, Month, Temp);
21     cout << "average high temp: ";
22     cout << averageHigh(Data, Month, Temp) << endl; //return & cout?
23     cout << "average low temp: ";
24     cout << averageLow(Data, Month, Temp) << endl;
25     cout << "highest temp: ";
26     cout << indexHighTemp(Data, Month, Temp) << endl;
27     cout << "lowest temp: ";
28     cout << indexLowTemp(Data, Month, Temp) << endl;
29     return 0;
30 }
31
32 int getData(int temperature[][Temp], int, int){
33     for (int x=0; x < Month; x++)
34     {
35         for (int y=0; y < Temp; y++)
36         {
37             cout << "please enter the temperature :";
38             cin >> temperature[x][y];
39         }
40         if (temperature[x][0] < temperature[x][1])
41             swap (temperature[x][0], temperature[x][1]);
42     }
43     for (int x=0; x < Month; x++)
44     {
45         for (int y=0; y < Temp; y++)
46         {
47             cout << temperature[x][y] << " ";
48         }
49         cout << endl;
50     }
51 }
52
53 int averageHigh(int temperature[][Temp], int, int){//parameter也可以不要設新的，可以用舊的，對應位子會比較好對應
54     int total = 0;
55     for (int x = 0; x < Month; x++)
56     {
57         for (int y = 0; y < Temp; y++)
58             if (y == 0)
59             {
60                 total += temperature[x][y];
61             }
62     }
63     int AH = total / Month;
64     return AH;
65 }
66
67 int averageLow(int temperature[][Temp], int, int){
68     int total = 0;
69     for (int x = 0; x < Month; x++)
70     {
71         for (int y = 0; y < Temp; y++)
72             if (y == 1)
73             {
74                 total += temperature[x][y];
75             }
76     }
77     int AL = total / Month;
78     return AL;
79 }
80
81 int indexHighTemp(int temperature[][Temp], int, int){//這一個最後印出來會有問題
82     int IHT = temperature[0][0];
83     int y = 0;
84     for (int x = 0; x < Month; x++)
85     {
86         if (IHT < temperature[x][y])
87         {
88             IHT = temperature[x][y];
89         }
90     }
91     return IHT;
92 }
93
94 int indexLowTemp(int temperature[][Temp], int, int){//這一個最後印出來會有問題
95     int ILT = temperature[0][1];
96     int y = 1;
97     for (int x = 0; x < Month; x++)
98     {
99         if (ILT > temperature[x][y])
100         {
101             ILT = temperature[x][y];
102         }
103     }
104     return ILT;
105 }
106

```

C:\devcpp\hw13\hw13-1\hw13-1.exe

```

please enter the temperature :36
please enter the temperature :45
please enter the temperature :56
please enter the temperature :34
please enter the temperature :23
please enter the temperature :45
please enter the temperature :23
please enter the temperature :12
please enter the temperature :23
please enter the temperature :24
please enter the temperature :25
please enter the temperature :26
12 11
14 13
15 14
15 14
16 13
34 26
45 36
56 34
45 23
23 12
24 23
26 25
average high temp: 27
average low temp: 20
highest temp: 56
lowest temp: 11
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```