// 7b

#include <iostream>

#include <iomanip>

using namespace std;

int main()

{

double rainfall[12];

double total = 0, average, largest, smallest, largestMonth, smallestMonth;

for(int i = 0; i < 12; i++){

cout << "Enter the rainfall (in inches) for month #" << i + 1 << ": ";

cin >> rainfall[i];

total += rainfall[i];

}

average = total / 12;

largest = rainfall[0];

smallest = rainfall[0];

for(int i = 1; i < 12; i++){

if(rainfall[i] > largest){

largest = rainfall[i];

largestMonth = i + 1;

}

if(rainfall[i] < smallest){

smallest = rainfall[i];

smallestMonth = i + 1;

}

}

cout << fixed << setprecision(2) << "\nThe total rainfall for the year is " << total << " inches."

<< "\nThe average rainfall for the year is " << average << " inches."

<< "\nThe largest amount of rainfall was " << largest << " inches in month " << setprecision(0) << largestMonth

<< "\nThe smallest amount of rainfall was " << fixed << setprecision(2) << smallest << " inches in month " << setprecision(0) << smallestMonth;

return 0;

}

/\* Test result

Enter the rainfall (in inches) for month #1: 0.4

Enter the rainfall (in inches) for month #2: 0.9

Enter the rainfall (in inches) for month #3: 2.4

Enter the rainfall (in inches) for month #4: 7.9

Enter the rainfall (in inches) for month #5: 2.1

Enter the rainfall (in inches) for month #6: 0.3

Enter the rainfall (in inches) for month #7: 0

Enter the rainfall (in inches) for month #8: 0

Enter the rainfall (in inches) for month #9: 0

Enter the rainfall (in inches) for month #10: 0.1

Enter the rainfall (in inches) for month #11: 1.5

Enter the rainfall (in inches) for month #12: 1.9

The total rainfall for the year is 17.50 inches.

The average rainfall for the year is 1.46 inches.

The largest amount of rainfall was 7.90 inches in month 4

The smallest amount of rainfall was 0.00 inches in month 7

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