Your area of research is climate change, and you collect the temperatures on consecutive days during a certain period of time. Now you want to find out how the average temperature changed over that time span, so you need to find the average temperature after each new measurement. You don't think that digits after the decimal point make any difference, so you calculate rounded average temperatures. To make the process more entertaining, you round the first value up, the second one down, the third one up, and so on.

In other words, the results array should contain the following values: [ceil(t[0] / 1), floor((t[0] + t[1]) / 2), ceil((t[0] + t[1] + t[2]) / 3), ...]. Here t is used as shorthand for measurements, ceilmeans round up to the nearest integer value, and floor means round down.

Given a list of measurements, return the average temperatures after each measurement has been rounded as described above.

**Example**

For measurements = [12, -5, 9], the output should be  
getTemperatureInfo(measurements) = [12, 3, 6].

The first value in the results array remains the same, 12, since the average of one value is just itself. The second value in the results array is the average of 12and -5, rounded down. The third value in the results array is the average of 12, -5, and 9, rounded up.

* **[time limit] 3000ms (cs)**
* **[input] array.integer measurements**

Temperature values for consecutive measurements.

*Constraints:*  
1 ≤ measurements.length ≤ 20,  
-50 ≤ measurements[i] ≤ 50.

* **[output] array.integer**

<https://codefights.com/challenge/uJgCw8pfLQoLhTyMM?utm_source=featuredChallenge&utm_medium=email&utm_campaign=email_notification>

static int[] getTemperatureInfo(int[] measurements)

{

List<int> res = new List<int>();

double sum = 0;

bool band = true;

for (int i = 0; i < measurements.Length; i++)

{

sum += measurements[i];

res.Add(band ? (int)Math.Ceiling(sum / (i + 1)) :

(int)Math.Floor(sum / (i + 1)));

band = !band;

}

return res.ToArray();

}

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

namespace ConsoleApplication1

{

class Program

{

static int[] getTemperatureInfo(int[] measurements)

{

List<int> res = new List<int>();

double sum = 0;

bool band = true;

for (int i = 0; i < measurements.Length; i++)

{

sum += measurements[i];

if (band)

{

res.Add((int) Math.Ceiling( sum / (i + 1)));

}

else

{

res.Add((int)Math.Floor(sum / (i + 1)));

}

band = !band;

}

return res.ToArray();

}

static void Main(string[] args)

{

int[] measurements = { 12, -5, 9 };

foreach (int elem in getTemperatureInfo(measurements))

{

Console.Write(elem + " ");

}

Console.ReadLine();

}

}

}