

Problem A

It's Hot! It's Cold!

Problem ID: itshotitscold

A meteorologist is curious to see how temperature changes from one day to another in Chicago. Does it mostly go down or up? Or does it mostly stay the same? For this problem, you will write a program to help answer those questions. To help us find this out, the University of Chicago Weather Service has been dutifully taking a daily temperature measurement from the top of Ryerson Physical Laboratory. So, suppose we were given the following temperature measurements:

Day	1	2	3	4	5
Temperature	10	15	15	20	-5
Change	—	Up	Same	Up	Down

We are concerned with how temperature changes relative to the previous day and wish to count the number of days when the temperature goes down, the number of days it stays the same, and the number of days it goes up. So, in this case, there is one day when it went down (from 20 to -5 in day 5), one day where it stayed the same (day 3's temperature is the same as the previous day's), and two days where the temperature went up (from 10 to 15 in day 2, and from 15 to 20 in day 4). Notice how we can't compute a change for day 1, since we have no data about the previous day's temperature.

Input

The input is composed of two lines. The first line contains a single positive integer n ($2 \leq n \leq 100$) that specifies the number of temperatures. The second line contains the temperatures, each separated by a single space. Each temperature is represented by an integer x ($-50 \leq x \leq 50$).

Output

The output is three integers, each separated by a single space: the number of times the temperature went down, the number of times it stayed the same, and the number of times it went up.

Sample Input 1

5 10 15 15 20 -5	1 1 2
---------------------	-------

Sample Output 1

Sample Input 2

5 -1 -10 -1 -10 -10	2 1 1
------------------------	-------

Sample Output 2

Sample Input 3**Sample Output 3**

7 10 9 8 8 8 20 25	2 2 2
-----------------------	-------