

Problem B. Breaking the Records

OS Linux

Maria plays college basketball and wants to go pro. Each season she maintains a record of her play. She tabulates the number of times she breaks her season record for *most points* and *least points* in a game. Points scored in the first game establish her record for the season, and she begins counting from there.

Example

scores = [12, 24, 10, 24]

Scores are in the same order as the games played. She tabulates her results as follows:

Game	Score	Minimum	Maximum	Count	
				Min	Max
0	12	12	12	0	0
1	24	12	24	0	1
2	10	10	24	1	1
3	24	10	24	1	1

Given the scores for a season, determine the number of times Maria breaks her records for *most* and *least* points scored during the season.

Function Description

Complete the *breakingRecords* function in the editor below.

breakingRecords has the following parameter(s):

- *int scores[n]*: points scored per game

Returns

- *int[2]*: An array with the numbers of times she broke her records. Index 0 is for breaking *most points* records, and index 1 is for breaking *least points* records.

Input Format

The first line contains an integer *n*, the number of games.

The second line contains *n* space-separated integers describing the respective values of *score*₀, *score*₁, ..., *score*_{*n*-1}.

Constraints

- $1 \leq n \leq 1000$
- $0 \leq \text{scores}[i] \leq 10^8$

Sample Input 0

9
10 5 20 20 4 5 2 25 1

Sample Output 0

2 4

Explanation 0

The diagram below depicts the number of times Maria broke her best and worst records throughout the season:

Game	0	1	2	3	4	5	6	7	8
Score	10	5	20	20	4	5	2	25	1
Highest Score	10	10	20	20	20	20	20	25	25
Lowest Score	10	5	5	5	4	4	2	2	1

She broke her best record twice (after games **2** and **7**) and her worst record four times (after games **1**, **4**, **6**, and **8**), so we print **2 4** as our answer. Note that she *did not* break her record for best score during game **3**, as her score during that game was *not* strictly greater than her best record at the time.

Sample Input 1

10
3 4 21 36 10 28 35 5 24 42

Sample Output 1

4 0

Explanation 1

The diagram below depicts the number of times Maria broke her best and worst records throughout the season:

Game	0	1	2	3	4	5	6	7	8	9
Score	3	4	21	36	10	28	35	5	24	42
Highest Score	3	4	21	36	36	36	36	36	36	42
Lowest Score	3	3	3	3	3	3	3	3	3	3

She broke her best record four times (after games **1**, **2**, **3**, and **9**) and her worst record zero times (no score during the season was lower than the one she earned during her first game), so we print **4 0** as our answer.