

❧ SNOWFALL ❧

Snow City has very predictable weather. Experiments show that snow will fall on a given day if the temperatures of that day, the previous day, and two days before are all less than or equal to 0 degrees celsius.

You are given the daily temperatures in Snow City for D consecutive days. Determine how many days during this period will have snowfall. (Assume that there are no snowfalls before the given period.)

Input

The first line contains an integer D ($3 \leq D \leq 1\,000$), the number of days. The second line contains D integers, separated by spaces, representing the temperature in degrees celsius of each day in order. The temperature each day is between $-30\,000$ and $30\,000$ degrees celsius.

Output

Output the total number of days with snowfall.

Example

Input	Output
10 2 1 0 -2 -3 -2 -1 1 -1 1	3
9 -3 -2 -1 0 1 0 -1 -2 -3	4

- In the first example, snow falls on 3 days (days 5, 6, and 7).
- In the second example, snow falls on 4 days (days 3, 4, 8, and 9).