### Shoot the Targets

You are at a carnival with a date and you're trying to impress them. You notice a shooting range and you know what you have to do, you're going to win them the enormous stuffed panda bear! To win the panda bear you need to **maximize** your points in a single game.

Beside the shooting range there's a sign with a short description:

- There are  $0 \le n \le 500$  targets.
- The targets are worth between 0 and 100 points, inclusive.
- If you hit a target you get points for the target itself, multiplied by its adjacent targets.

Example: 
$$[3, 1, 2] \Rightarrow Hit \#1 \Rightarrow 3.1.2 = 6 \text{ points}$$

• After the points are calculated, the targets are all pushed back together.

Example: 
$$[3, 1, 2] \Rightarrow Hit \#1 \Rightarrow [3, 2]$$

• You can assume that targets out of bounds don't affect the score (worth 1 point).

Example: 
$$[3, 2] \Rightarrow Hit \#3 \Rightarrow 1.3.2 = 6 points$$

#### Input

There will be several test cases of input, keep reading integer arrays until end of input (null).

#### Output

For every array, print out the maximum achievable points.

## Sample Input

[3, 1, 5, 8]

[1]

[0, 1, 0]

# **Sample Output**

167

1

1