

Given a sequence of integers  $S = \{S_1, S_2, \dots, S_n\}$ , you should determine what is the value of the maximum positive product involving consecutive terms of  $S$ . If you cannot find a positive sequence, you should consider 0 as the value of the maximum product.

## Input

Each test case starts with  $1 \leq N \leq 18$ , the number of elements in a sequence. Each element  $S_i$  is an integer such that  $-10 \leq S_i \leq 10$ . Next line will have  $N$  integers, representing the value of each element in the sequence. There is a blank line after each test case. The input is terminated by end of file (EOF).

## Output

For each test case you must print the message: 'Case # $M$ : The maximum product is  $P$ .', where  $M$  is the number of the test case, starting from 1, and  $P$  is the value of the maximum product. After each test case you must print a blank line.

## Sample Input

```
3
2 4 -3

5
2 5 -1 2 -1
```

## Sample Output

```
Case #1: The maximum product is 8.

Case #2: The maximum product is 20.
```