

Problem D - Maximum Product

Time Limit: 1 second

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.
```

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