787 Maximum Sub-sequence Product

Bob needs money, and since he knows you are here, he decided to gamble intelligently. The game is rather simple: each player gets a sequence of integers. The players must determine, by using their mega-pocket computers, which is the maximum product value which can be computed with non empty sub-sequences of consecutive numbers from the given sequence. The winner is the one which gets first the right result.

Can you help Bob with a program to compute quickly the wanted product, particularly when the sequence is quite long ?

Input

The input file contains sequences of numbers. Each sequence starts on a new line and may continue on several subsequent lines. Each sequence ends with the number -999 (which is not part of the sequence).

Output

The maximum sub-sequence product for each sequence must be written on the standard output, on a different line. A simple example is illustrated in the figure below.

It is known that the products of sub-sequences are numbers which can be represented as long integers.

Sample Input

```
1 2 3 -999
-5 -2 2 -30 -999
-8 -999
-1 0 -2 -999
```

Sample Output

```
6
120
-8
0
```