

# British Informatics Olympiad Final

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## Noitargetni

*Noitargetni*, a rather backwards type of integration, consists of taking the smallest value in a sequence and multiplying it by the length of the sequence. For example, applying noitargetni to the sequence 5 8 7 2 3 4 gives 12 ( $6 \times 2$ ). When applying noitargetni to a contiguous subsequence (i.e. a block of adjacent numbers) we use the length of the subsequence, so 5 8 7 would give 15 and 8 7 would give 14.

For any sequence we can calculate the largest value obtainable by noitargetni applied to that sequence, or one of its contiguous subsequences.

Write a program that inputs a sequence of positive integers (all between 1 and  $2^{12}$  inclusive) and outputs a single integer, the largest value obtainable by noitargetni. Each of the integers in the input will appear on a separate line and there will be no more than  $2^{20}$  lines. The input sequence will be terminated by a line containing the single number -1.

### Sample Input

```
5
8
7
2
3
4
-1
```

### Sample Output

```
15
```