RMQSQ - Range Minimum Query

no tags

You are given a list of **N** numbers and **Q** queries. Each query is specified by two numbers *i* and *j*; the answer to each query is the minimum number between the range [i, j] (inclusive).

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Note: the query ranges are specified using 0-based indexing.

Input

The first line contains **N**, the number of integers in our list (**N <= 100,000**). The next line holds **N** numbers that are guaranteed to fit inside an integer. Following the list is a number **Q** (**Q <= 10,000**). The next **Q** lines each contain two numbers **i** and **j** which specify a query you must answer (**0 <= i, j <= N-1**).

Output

For each query, output the answer to that query on its own line in the order the queries were made.

Example

```
Input:
3
1 4 1
2
1 1
1 2

Output:
4
1
```

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Added by:	Joshua Kirstein (/users/joshkirstein)
Date:	2014-10-18
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Languages:	All

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easy normal hard extreme

Implementation difficulty

easy normal hard extreme

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voidpoint11 (/users/voidpoint11): 2024-05-21 16:34:15
It is a sparse table problem but I solve this using by segment tree. LOL .xd

foxydimj007 (/users/foxydimj007): 2024-05-16 17:40:25
you need sparse table for this

tauseeb17 (/users/tauseeb17): 2023-06-18 16:46:56
why o(N*Q) gives A.C in this question.