



Min Max Riddle ☆

You have successfully solved Min Max Riddle

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Given an integer array of size n , find the maximum of the minimum(s) of every window size in the array. The window size varies from 1 to n .

For example, given $arr = [6, 3, 5, 1, 12]$, consider window sizes of 1 through 5 . Windows of size 1 are (6) , (3) , (5) , (1) , (12) . The maximum value of the minimum values of these windows is 12 . Windows of size 2 are $(6, 3)$, $(3, 5)$, $(5, 1)$, $(1, 12)$ and their minima are $(3, 3, 1, 1)$. The maximum of these values is 3 . Continue this process through window size 5 to finally consider the entire array. All of the answers are $12, 3, 3, 1, 1$.

Function Description

Complete the riddle function in the editor below. It must return an array of integers representing the maximum minimum value for each window size from 1 to n .

riddle has the following parameter(s):

- arr : an array of integers

Input Format

The first line contains a single integer, n , the size of arr .

The second line contains n space-separated integers, each an $arr[i]$.

Constraints

$$1 \leq n \leq 10^6$$

$$0 \leq arr[i] \leq 10^9$$

Output Format

Single line containing n space-separated integers denoting the output for each window size from 1 to n .

Sample Input 0

```
4
2 6 1 12
```



Sample Output 0

```
12 2 1 1
```

Explanation 0

Here $n = 4$ and $arr = [2, 6, 1, 12]$

window size	window1	window2	window3	window4	maximum of all windows
1	2	6	1	12	12
2	2	1	1		2
3	1	1			1
4	1				1

Sample Input 1

```
7
1 2 3 5 1 13 3
```

Sample Output 1

```
13 3 2 1 1 1 1
```

Explanation 1

Here $n = 7$ and $arr = [1, 2, 3, 5, 1, 13, 3]$

win size	w_1	w_2	w_3	w_4	w_5	w_6	w_7	maximum of all windows
1	1	2	3	5	1	13	3	13
2	1	2	3	1	1	3		3
3	1	2	1	1	1			2
4	1	1	1	1				1
5	1	1	1					1
6	1	1						1
7	1							1

Sample Input 2

```
6
3 5 4 7 6 2
```

Sample Output 2

```
7 6 4 4 3 2
```

Explanation 2

Here $n = 6$ and $arr = [3, 5, 4, 7, 6, 2]$

win size	w_1	w_2	w_3	w_4	w_5	w_6	maximum of all windows
1	3	5	4	7	6	2	7
2	3	4	4	6	2		6
3	3	4	4	2			4
4	3	4	2				4
5	3	2					3
6	2						2

Java 7



```

136     }
137
138     /**
139      * Print results in ascending order of window size.
140      */
141     private static void printResults(int[] minMax,
142     BufferedWriter out) throws IOException {
143         for (int i = 0; i < minMax.length; i++) {
144             out.write(minMax[i] + " ");
145         }
146     }
147

```

Line: 143 Col: 40

☒ Upload Code as File ☐ Test against custom input

Run Code

Submit Code

Congratulations

You solved this challenge. Would you like to challenge your friends?



Test case 0

Test case 1

Test case 2

Test case 3

Compiler Message

Success

Input (stdin)

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305**894059773 675064454 766421039 183804740 272974**[Download to view the full testcase](#)