

maximum difference between the two elements

Given an array **arr[]** of integers, find out the **maximum difference** between any two elements such that **larger element appears after the smaller number**.

Input Format

First line contains an integer **N** represent the size of array.

Second line contains **N** number of integers represent the elements of array.

Constraints

```
0 <= N <= 10000  
  
0 <= arr[i] <= 10000
```

Output Format

print the required output.

Sample Input 0

```
7  
2 3 10 6 4 8 1
```

Sample Output 0

```
8
```