D. Maximal Difference

You are given an array of integers a_i. Find the largest absolute value of difference between adjacent elements of the array $max(abs(a_i - a_{i+1}))$.

Input

The only line of the input contains a list of space-separated integers a_i $(1 \leq a_i \leq 100)$ — elements of the array. The size of the array is between 2 and 10, inclusive. Note that the size of the array is not given explicitly!

Output

Output a single integer — the largest absolute value of difference between adjacent elements of the array.

Examples

input

```
2 10 4 8 6 12
```

output

```
8
```

input

```
3 3
```

output

```
0
```