

Geek and Buildings

You are given an array **heights** of **n** elements whose **ith** element denotes the height of the **ith** building. Geek likes to jump from one building to another. He only jumps to the next taller building and stops when he reaches the tallest building.

The energy required for this journey is **XOR** of all the heights of the buildings on which Geek jumps until he stops. Geek can start his journey from any building. Find the maximum energy required before he starts.

Example 1:

Input:

n = 5

heights[] = {3, 1, 4, 5, 6}

Output: 7**Explanation:**

If he starts from building 1,
required energy = $3 \oplus 4 \oplus 5 \oplus 6 = 4$.

If he starts from building 2,
required energy = $1 \oplus 4 \oplus 5 \oplus 6 = 6$.

If he starts from building 3,
required energy = $4 \oplus 5 \oplus 6 = 7$.

If he starts from building 4,
required energy = $5 \oplus 6 = 3$.

If he starts from building 5,
required energy = 6

The maximum energy required is 7, in the case where he starts jumping from building 3.

Example 2:

Input:

```
n = 2  
heights[] = {4, 4}
```

Output: 4

Your Task:

You don't need to print or input anything. Complete the function **maximum_energy()** which takes integer **n** and array **heights** as input parameters and return an integer, denoting the maximum energy required.

Constraints:

- $1 \leq n \leq 10^5$
- $1 \leq \text{heights}[i] \leq 10^9$