Maximizing XOR

Problem Statement

Given two integers, \( L \) and \( R \), find the maximal value of \( A \text{ xor} B \), where \( A \) and \( B \) satisfy the following condition:

\[ L \leq A \leq B \leq R \]

Input Format

The input contains two lines; \( L \) is present in the first line and \( R \) in the second line.

Constraints

\[ 1 \leq L \leq R \leq 10^3 \]

Output Format

The maximal value as mentioned in the problem statement.

Sample Input

```
10
15
```

Sample Output

```
7
```

Explanation

The input tells us that \( L = 10 \) and \( R = 15 \). All the pairs which comply to above condition are the following:

\[ \begin{align*}
10 \oplus 10 &= 0 \\
10 \oplus 11 &= 1 \\
10 \oplus 12 &= 6 \\
10 \oplus 13 &= 7 \\
10 \oplus 14 &= 4 \\
10 \oplus 15 &= 5 \\
11 \oplus 11 &= 0 \\
11 \oplus 12 &= 7 \\
11 \oplus 13 &= 6 \\
11 \oplus 14 &= 5 \\
11 \oplus 15 &= 4 \\
12 \oplus 12 &= 0 \\
12 \oplus 13 &= 1 \\
12 \oplus 14 &= 2 \\
12 \oplus 15 &= 3 \\
13 \oplus 13 &= 0 \\
13 \oplus 14 &= 3 \\
13 \oplus 15 &= 2 \\
14 \oplus 14 &= 0 \\
14 \oplus 15 &= 1 \\
15 \oplus 15 &= 0 \\
\end{align*} \]
Here two pairs (10, 13) and (11, 12) have maximum xor value 7, and this is the answer.