Maximizing XOR



Given two integers, L and R, find the maximal value of $A \times B$, 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

 $1 \le L \le R \le 10^3$

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:

 $10 \oplus 10 = 0$

 $10 \oplus 11 = 1$

 $10 \oplus 12 = 6$

 $10 \oplus 13 = 7$

 $10 \oplus 14 = 4$

 $10 \oplus 15 = 5$

 $11 \oplus 11 = 0$

 $11 \oplus 12 = 7$

 $11 \oplus 13 = 6$

 $11 \oplus 14 = 5$

 $11 \oplus 15 = 4$

 $12 \oplus 12 = 0$

 $12 \oplus 13 = 1$

 $12 \oplus 14 = 2$

 $12 \oplus 15 = 3$

 $13 \oplus 13 = 0$

 $13 \oplus 14 = 3$

 $13 \oplus 15 = 2$

 $14 \oplus 14 = 0$

 $14 \oplus 15 = 1$

 $15 \oplus 15 = 0$

Here two pairs (10, 13) and (11, 12) have maximum xor value 7, and this is the answer.