

Find the max XOR value

You have two integers **L** and **R**, and you are required to find the max xor value of a and b where $L \leq a \leq R$ and $L \leq b \leq R$

Input

Two integers in a line. L, R $\leq 1e9$

Output

One integer, the answer

Example

Input:

1 10

Output:

15