XORmium

HackerRank

It is the year 2099. Earth is at war with the planet Kepler-452b over control of Mars. You are a materials scientist researching a new, indestructible material called XORmium for use in a war suit. This material is synthesized by doping a mixture of Adamantium and Vibranium with Titanium. The optimal amount of Titanium is determined by:

```
T = (A ⊕ C) + (V ⊕ C)
  where,
    A - The amount of Adamantium
    V - The amount of Vibranium
    C - Doping coefficient
    ⊕ - Bitwise XOR
```

You need to find out the optimal amount of Titanium T to be used for any given doping coefficient C.

Input Format

The only line contains space seperated A and V.

Constraints

- $1 \leq A \leq 10^9$
- $1 \leq V \leq 10^9$

Output Format

Output the optimal value for T.

Sample Input 0

```
6 12
```

Sample Output 0

```
10
```

Sample Input 1

```
4922 2556
```

Sample Output 1

```
6854
```