Problem F6403
Price For Product

Alice is selling a product to the rest of the world, and, not surprisingly, he has a competitor Bob. Suppose only Alice and Bob have this product on the earth, so they only compete with each other.

Originally Alice sells this product at price a and Bob sells this product at price b. If they are selling at the same price, then they are happy with each other. If not, the one selling at higher price x will change his price to $\left\lfloor \frac{x}{2} \right\rfloor$. And this process continues till they are happy with each other(having the same price). So what will be the price for this product when they are happy with each other?

Input

The first line consist of two space separated integers $a(1 \leq a \leq 100)$ $b(1 \leq b \leq 100)$, denoting the initial price for Alice and Bob.

Output

Print a single integer on a line, the price of the product when Alice and Bob are happy with each other.

Sample Input 1

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2 2
```

Sample Output 1

```
2
```

Sample Input 2

```
2 7
```

Sample Output 2

```
1
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