# 29th Jan 2023

## First:-

#### Min operations:: Easy

Given two numbers **a** and **b**. In one operation you can pick any non negative integer **x** and either of **a** or **b**. Now if you picked **a** then replace **a** with **a&x** else if you picked **b** then replace **b** with **b&x**.

Return the minimum number of operation required to make **a** and **b** equal.

Note: Here & represents bitwise AND operation.

### Example 1:

```
Input:
a = 5, b = 12
Output:
2
Explanantion:
In first operation replace
a = a&4 = 4
after that replace
b = b&6 = 4
Hence both are same after applying two operations.
```

## Example 2:

```
Input:
a = 100, b = 100
Output:
0
Explanation:
Already same.
```

#### Your Task:

You don't need to read, input, or print anything. Your task is to complete the function **solve()**, which takes two integers **a** and **b** as input parameters and returns the answer.

**Expected Time Complexity: O(1) Expected Auxiliary Space: O(1)** 

#### **Constraints:**

 $0 \le a, b \le 10^9$ 

## **CODE SECTION:-**

```
int solve(int a, int b)
{
    // code here

    if (a == b)
        return 0;
    if (a > b)
    {
        if (a * b) == min(a, b))
        {
            return 1;
        }
        else
            return 2;
}
```

# -: DONE FOR TODAY :-