The Hamming distance between two numbers is the number of bits that differ between them.

Given two numbers a and b, return the Hamming distance between them.

**Example**

The number 5, which has bits 0101, and the number 3, which has bits 0011, would have a Hamming distance of 2, as two bits have different values.

**Input 1 (a)** → integer :

The first number to compare.

**Input 2 (b)** → integer :

The second number to compare.

**Output** → integer :

The Hamming distance between a and b.

<https://codefights.com/challenge/ZN7aH94ugCFRsvGXW>

--ACEPTADO--

#include <iostream>

#include <stdio.h>

using namespace std;

int hammingDistance(int a, int b) {

        int dist = 0;

        while(a > 0 && b > 0) {

                if(a % 2 != b % 2 ) {

                        dist++;

                }

                a/=2;

                b/=2;

        }

        while(a > 0) {

                dist++;

                a/=2;

        }

        while(b > 0) {

                dist++;

                b/=2;

        }

        return dist;

}

int main() {

        int d = hammingDistance(5, 3);

        printf("**\n**%d ", d);

        return 0;

}