Section No.	01	Section Name	Coding for Product Development Companies
Q Paper No.	07	Topic Name	Functions
Total Marks	30	Time Limit	90 minutes

Q.1) Tricky Problem

You found this problem on the Road.
It was labeled "The TRICKY PROBLEM"
It showed you an Equation:

A XOR B is C
"Given A and B find C"
You laughed looking at the equation, knowing XOR is the bitwise exclusive or.
The next line shocked you and you went running to your friend for help.
It said
"Sorry, the question is Given A and C find B"

Input
The only line contains two number A and C

Output
The only line containing one integer: the answer.

Examples
input1
1 3

output1
2

Note
we know 1 xor 2 is 3

Q.2) Reducing Map

a function can be reduced as
f(0,0) = 0
f(2X,2Y) = f(X,Y) + 4
f(2X+1,2Y) = f(X,Y) + 2
f(2X,2Y+1) = f(X,Y) + 3
f(2X+1,2Y+1) = f(X,Y) + 1

Input Format
Given a value of X,Y, with F(x,y) to be found, tell the value of f(X,Y)

Constraints
X,Y <= 10^9

Output Format
Print the value of F(x,y)

Sample Input
10 11

Sample output
9

Explanation:
f(10,11) = f(5,5) + 3 = f(2,2) +4 = f(1,1)+8 = f(0,0) + 9 = 10

Q.3) Factorial

Given a number N, count the number of trailing 0s in the given number's factorial. Write a function to do the same.

Input format:
A number N would be given

Output:
Give one number, the number of Zeroes in the factorial of the number

Constraints:
N<=300

Sample input
6

Sample output
1

Explanation:
720

6! has one 0 at the end

#Notes:
The ability to understand a factorial is tested, If a candidate goes and takes the factorial and calculates, he would fail the testcases as you can't save that many digits