#include <iostream>

#include <string>

#include <algorithm>

using namespace std;

аint rev(int x) {

string binary = "";

while (x > 0) {

binary += (x % 2) + '0';

x /= 2;

}

if (binary.empty()) return 0;

return stoi(binary, nullptr, 2);}

int main() {

int n;

cin >> n;

int count = 0;

while (n != 0) {

n = rev(n) - 1;

count++;

}

cout << count << endl;

return 0;}