// Forward declaration of guess API.

// @param num, your guess

// @return -1 if my number is lower, 1 if my number is higher, otherwise return 0

int guess(int num);

// Games like these are often played on the radio.

// This is a simple binary search.

class Solution {

public:

int guessNumber(int n) {

int left = 0, right = n;

while (left <= right) {

int ourGuess = left + (right - left) / 2;

if (guess(ourGuess) == 0) {

return ourGuess;

} else if (guess(ourGuess) == -1) {

right = ourGuess - 1;

} else {

left = ourGuess + 1;

}

}

return 0; // Given that the number is always between 1 and n,

// this return statement will never get called.

}

};