



Brad needs to get to house number *a* as quickly as possible. He starts driving from the beginning of the street and drives his car to house *a*. To get from the beginning of the street to houses number 1 and *n*, he spends exactly 1 second. He also spends exactly one second to drive the distance between two neighbouring houses. Brad can park at any side of the road, so the distance between the beginning of the street at the houses that stand opposite one another should be considered the same.

Your task is: find the minimum time Brad needs to reach house a.

Constraints:

 $1 \le a \le n \le 100000$

Input Format:

The first line of the input contains two integers, n and a - the number of houses on the street and the number of the house that Brad needs to reach, correspondingly. It is guaranteed that number n is even.

Output Format:

Print a single integer — the minimum time Brad needs to get from the beginning of the street to house a.

Test Cases

∨ Logical Test Cases

Test Case 1

Test Case 2

INPUT (STDIN) INPUT (STDIN) 1628 274 1764 1288 EXPECTED OUTPUT EXPECTED OUTPUT 678 239 ✓ Mandatory Test Cases Test Case 1 Test Case 2 Test Case 3 KEYWORD KEYWORD KEYWORD public static void int n,a; n= sc.nextInt(); housenumbers(int x,int y) Test Case 4 KEYWORD housenumbers(n,a); Complexity Test Cases Test Case 1 Test Case 2 Test Case 3 CYCLOMATIC COMPLEXITY TOKEN COUNT NLOC 3 140 21