

1. Sharing is Caring

Master Shifu has N cookies with him and he wants to distribute them to his X students in a way such that:

1. *Each student gets at least one cookie*
2. *No two students get the same number of cookies*
3. *No cookies are left over*

Find out if it is possible for Master Shifu to do so.

Note: It's not possible to break the cookies into parts.

Input Format:

Only line of input contains two integers N and X .

Output Format:

Print **YES**, if Master Shifu can distribute else print **NO**.

Constraints:

$$1 \leq X \leq N \leq 10000$$

Sample I/O:

Input 1:

10 2

Output 1:

YES

Input 2:

8 4

Output 2:

NO

Input 3:

110 14

Output 3:

YES

Explanation:

Input 1:

One way Master Shifu can distribute **10** cookies to his **2** students obeying the conditions is, **6** cookies for student 1 and **4** cookies for student 2. Note that distributing them as **5** and **5** is not possible because of the 2nd condition.

Input 2:

There is no way for Master Shifu to distribute **8** cookies to his **4** students by obeying the conditions. Because if he distributes

1 cookie to student 1,

2 cookies to student 2 and

3 cookies to student 3,

he will be left with **2** more cookies and he can't give those to the 4th student as it will break the condition 2.

2. First and Last pair

Given an array, find pairs of elements such that 1st element pair with the last element, 2nd element pair with last but one,

Note: if no pair is formed then pair that element with 0.

Input Format:

First-line contains an integer 'N' which indicates the length of the Array

The next line contains 'N' array elements

Output Format:

Display pairs of elements.

Sample input:

7

1 2 3 4 5 6 7

Sample Output:

1 7 2 6 3 5 4 0