Initial Test	
Programming Test 60 minutes	
Periode Berlaku Semester Ganjil 2023/2024 ***Valid on*** *Odd Year 2023/2024*	**Software Laboratory Center** **Assistant Recruitment 24-1**

Soal

Case

Spiral Dimension

You are given an integer **N**, representing the **length** of **array X**, which contains values $\boldsymbol{X_1, X_2, \dots, X_n}$. Additionally, you are given an integer **S**, which represents the total number of **segments**. It is important to note that **S** should always be **less than or equal** to **N**. For example, if the given array opens $[1, 2, 3]$ and **S** (segment) is **2**, splitted array will be $[1,2], [2,3], [3,1]$

Your task is to **split the array** X into S smaller arrays and print these arrays in a **spiral order**. The **direction** of the spiral should follow the same direction as **a clock**.

Input

The program will ask for multiple input, which is $N, X_1, X_2, \dots, X_n, S$.

Constraint

$1 \leq N \leq 10^4$

$1 \leq X_i \leq 1000$

$1 \leq S \leq N$

Output

Print the X_i

Example

Input	Output
5 10 23 9 3 12 3	10 23 9 3 12 10 23 10 12 3 9 23 9 3 12
9 1 2 3 4 5 6 7 8 9 9	1 2 3 4 5 6 7 8 9 1 2 3 4 5 6 7 8 7 6 5 4 3 2 1 9 8 7 6 5 4 3 2 3 4 5 6 7 8 9 1 2 3 4 5 6 5 4 3 2 1 9 8 7 6 5 4 5 6 7 8 9 1 2 3 4 3 2 1 9 8 7 6 7 8 9 1 2 1 9 8 9

Explanation

In the first case, $N = \mathbf{5}$, which means the array will contain **5 values**: $[10, 23, 9, 3, 12]$.

Given $S = \mathbf{3}$, the segment **length** should be 3. The segments are:

$[10, 23, 9]$,

$[23, 9, 3]$,

$[9, 3, 12]$,

$[3, 12, 10]$,

$[12, 10, 23]$.

The output should be the 2D array containing these segments arranged in a spiral order until all number printed like this: