# Problem 2 – Sequence of K Numbers

Write a program to **remove all sequences of k equal elements** from a sequence of integers. For example, if we have the sequence **3 3 3 8 8 2 5 1 7 7 7 4 4 4 4 3 4 4** and we remove all sequences of **k = 2** elements, we will obtain **3 2 5 1 7 3**. For **k = 3**, we will obtain the following result: **8 8 2 5 1 4 3 4 4**. For **k = 1**, the result will be empty.

## Input

The input data comes from the console. It should consist of a **two lines**:

* The first line holds the **input numbers**, separated one from another by a **space**.
* The second line holds the number **k**.

The input data will always be valid and in the format described. There is no need to check it explicitly.

## Output

The output should be printed on the console. It should consist of a **single line** holding the obtained sequence of numbers. Separate each number from the next number by a space.

## Constraints

* The input sequence numbers are integers in the range [-1000 … 1000].
* The **count** of the input numbers is in the range [1 … 1000].
* The number **k** is integer in the range [1 … 1000].
* Time limit: 0.1 seconds.
* Memory limit: 16 MB.

## Examples

|  |  |
| --- | --- |
| **Input** | **Output** |
| 3 3 3 8 8 2 5 1 7 7 7 4 4 4 4 3 4 4  2 | 3 2 5 1 7 3 |
| 3 3 3 8 8 2 5 1 7 7 7 4 4 4 4 3 4 4  3 | 8 8 2 5 1 4 3 4 4 |
| 3 3 3 8 8 2 5 1 7 7 7 4 4 4 4 3 4 4  4 | 3 3 3 8 8 2 5 1 7 7 7 3 4 4 |
| 1 1 100 1 1  2 | 100 |

bool print = false;

string input = Console.ReadLine();

int k = int.Parse(Console.ReadLine());

string[] numbers = input.Split(new char[] { ' ' }, StringSplitOptions.RemoveEmptyEntries);

int numbersOfElements = 0;

string lastNumber = numbers[0];

int count = 1;

for (int i = 1; i < numbers.Length; i++)

{

if (lastNumber==numbers[i])

{

count++;

}

else

{

numbersOfElements = count;

if (count>= k)

{

numbersOfElements = count % k;

}

for (int j = 0; j < numbersOfElements; j++)

{

Console.Write(" " + lastNumber);

}

count = 1;

}

lastNumber = numbers[i];

}

numbersOfElements = count;

if (count>=k)

{

numbersOfElements = count % k;

}

for (int j = 0; j < numbers.Length; j++)

{

Console.Write(" " + lastNumber);

}

}

}