Practice: Sorting

1 second, 32 MB

You are given a list of ***N*** integers. You want to sort them in an ascending order (smallest first). To save space for the output, you will be given another integer ***K*** and your program should output the **K**-th, ***2K***-th, ***3K***-th elements in the sorted list and so on.

Since the goal of this task is to let you practice writing the quick sort, you should implement the sorting function by yourself.

Input

The first line contain two integers ***N*** and ***K***. (1<=***N***<=100,000; 1<=***K***<=***N***)

Then the next ***N*** lines contains the list of integers. Each integer is between 0 and 1,000,000,000.

Output

Your program should print out **floor**(***N/K***) numbers, which is the ***K***-th, ***2K***-th, ***3K***-th,…. integers in the sorted list.

Example

Input	Output
7 2 10 20 4 23 17 20 100	10 20 23