

Sort an Array by a Given Position

You are given a list of integers of size N . Write an algorithm to sort the first K elements (from $\text{list}[0]$ to $\text{list}[k-1]$) of the list in ascending order and the remaining ($\text{list}[k]$ to $\text{list}[N-1]$) elements in descending order.

Input:

The first line of the input consists of two spaced integers – *size* and *num*, representing the number of elements in the list(N) and the number of elements to be sorted in ascending order (K). The next line consists of N space separated integers representing the elements of the list.

Output:

Print N space separated integers representing the sorted list.

Example:

Input:

8 3

11 7 5 10 46 23 16 8

Output:

5 7 11 46 23 16 10 8

Explanation:

The first three elements must be arranged in increasing order and the remaining elements in decreasing order.

Input:

8 4

7 43 12 4 1 3 78 6

Output:

4 7 12 43 78 6 3 1