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Question 7:

Import heapq library

Output = [] #To store the sorted output list

Declare an empty min heap with size k

Insert all 1st element in all the arrays into the min heap.

The min heap will auto sort the items while we insert element to it. So the root is the minimum among the 1st element in all the arrays.

While the min heap is not empty:

Append the root value to the output array

Delete the minimum element from the heap (root)

Insert the next element in the same array of the element deleted. If the next element doesn’t exist or array reaches the end, continue.