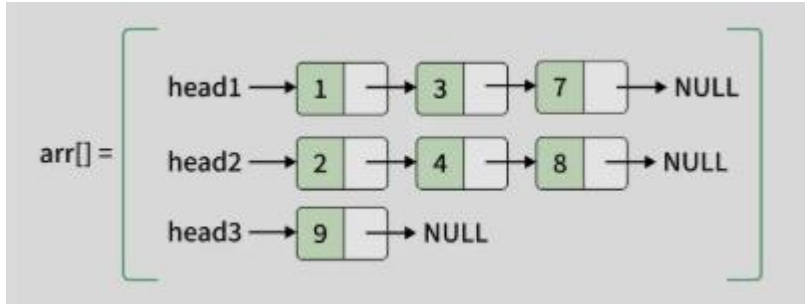


Merge K sorted linked lists

Given an array `arr[]` of **n sorted linked lists** of different sizes. Your task is to **merge** all these lists into a single **sorted** linked list and return the **head** of the merged list.

Examples:

Input:



Output: 1 -> 2 -> 3 -> 4 -> 7 -> 8 -> 9

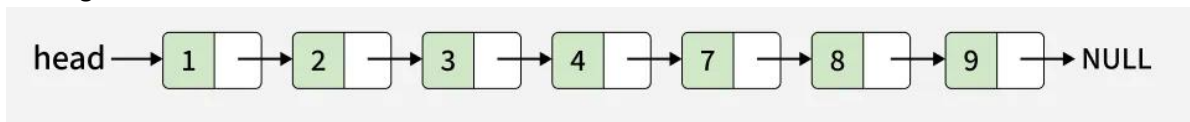
Explanation: The `arr[]` has 3 sorted linked list of size 3, 3, 1.

1st list: 1 -> 3 -> 7

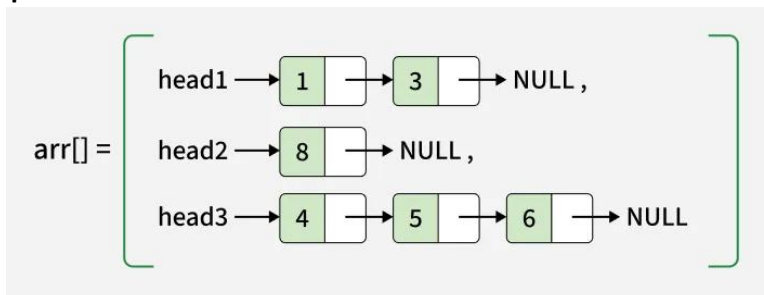
2nd list: 2 -> 4 -> 8

3rd list: 9

The merged list will be:



Input:



Output: 1 -> 3 -> 4 -> 5 -> 6 -> 8

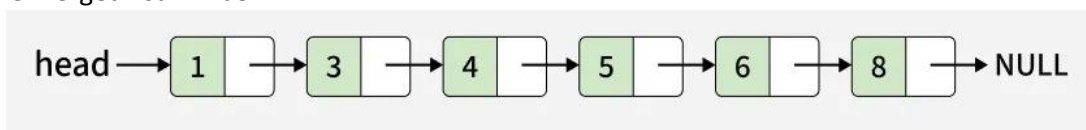
Explanation: The `arr[]` has 3 sorted linked list of size 2, 1, 3.

1st list: 1 -> 3

2nd list: 8

3rd list: 4 -> 5 -> 6

The merged list will be:



Constraints

$1 \leq \text{total no. of nodes} \leq 10^5$

$1 \leq \text{node} \rightarrow \text{data} \leq 10^3$