

Grokking the Coding Interview: Patterns for Coding Questions

43% completed

- Solution Review: Problem Challenge 2
- Problem Challenge 3
- Solution Review: Problem Challenge 3

Pattern: K-way merge

- Introduction
- Merge K Sorted Lists (medium)
- Kth Smallest Number in M Sorted Lists (Medium)
- Kth Smallest Number in a Sorted Matrix (Hard)
- Smallest Number Range (Hard)
- Problem Challenge 1
- Solution Review: Problem Challenge 1

Pattern : 0/1 Knapsack (Dynamic Programming)

Introduction

This pattern helps us solve problems that involve a list of sorted arrays.

Whenever we are given 'K' sorted arrays, we can use a **Heap** to efficiently perform a sorted traversal of all the elements of all arrays. We can push the smallest (first) element of each sorted array in a **Min Heap** to get the overall minimum. While inserting elements to the **Min Heap** we keep track of which array the element came from. We can, then, remove the top element from the heap to get the smallest element and push the next element from the same array, to which this smallest element belonged, to the heap. We can repeat this process to make a sorted traversal of all elements.

Let's see this pattern in action.

Interviewing soon? We've partnered with Hired so that companies apply to you instead of you applying to them. [See how](#)

[← Back](#)

Solution Review: Problem Challenge 3

☒ MARK AS COMPLETED[Next →](#)

Merge K Sorted Lists (medium)

[Report an Issue](#) [Ask a Question](#)