

Problem Solving: Heaps

Pre-read



Introduction

We have already learned about the general concepts of sorting mechanisms, mainly heap sort. Before this session, we have seen basic problems with heaps and heapify in JavaScript. In this session, we will learn some advanced problems on Heap.

What is a Heap?

A heap is a tree-like data structure with the property of complete tree. A complete tree is a tree in which all the nodes are filled in each level except the last one.

What will we be doing in this session?

We will be solving data structures and algorithms problems based on the heap and will deep dive into various approaches and discuss the time and space complexity for each of the problems.

- Find kth smallest element in an array
- Sort array by frequency
- Combine k sorted array
- Find median in real-time data
- Job Scheduler
- Make no adjacent character the same.

Upcoming Class Teaser

Problem-solving on Heap.