Data Structure and Algorithms

1. HashMaps
2. Recursion
3. DFS and BFS
4. Binary Search
5. Sliding Window
6. Heaps

Heaps

|  |  |
| --- | --- |
| Operation | Time Complexity |
| Top ( ) | O(1) |
| Insert ( ) | O(logn) |
| Remove ( ) | O(logn) |
| Heapify ( ) | O(n) |

Sliding Window

Binary Search – O(logn)

Depth First Search and Breadth First Search

Recursion include Trees, Graphs, Backtracking, DP and more.

HashMaps – e,g: Two Sums

Heaps

Dynamic Programming

1. Fibonacci Numbers
2. Zero / One Knapsack
3. Unbounded Knapsack
4. Longest Common Subsequences
5. Palindromes