

1. Week 01 - Graph (BFS + DFS)
  1. Module 1: Basic Graph, 2D Vector and Graph Representation
  2. Module 2: BFS and DFS
  3. Module 2.5: Practice Day 01
  4. Module 3: Cycle Detection, DFS on 2D Grid
  5. Module 3.5: Practice Day 02
  6. Module 4: Assignment 01
2. Week 02: Graph (Dijkstra + Extra)
  1. Module 5: Dijkstra Implementation
  2. Module 6: Dijkstra on 2D Grid and Problem Solving
  3. Module 6.5: Practice Day 01
  4. Module 7: Bellman Ford Algorithm & Floyd Warshall Algorithm
  5. Module 7.5: Practice Day 02
  6. Module 8: Assignment 02
3. Week 03: Graph Recap
  1. Module 9: BFS & DFS Related Problem Solving
  2. Module 10: Dijkstra Related Problem Solving
  3. Module 10.5: Practice Day 01
  4. Module 11: Disjoint Set and Minimum Spanning Tree
  5. Module 11.5: Practice Day 02
  6. Module 12: Mid Term Exam
4. Week 04 - Dynamic Programming Classic
  1. Module 13: Fibonacci Series and Basic DP (Memoization + Tabulation)
  2. Module 14: 0-1 Knapsack and Unbounded Knapsack
  3. Module 14.5: Practice Day 01
  4. Module 15: 0-1 Knapsack Variations (Subset Sum, Equal Sum Partition, Count of Subset Sum, Minimum Subset Sum Difference, Number of subset sum with given difference, Target Sum)
  5. Module 15.5: Practice Day 02
  6. Module 16: Assignment 03
5. Week 05 - Dynamic Programming Variations
  1. Module 17: Unbounded Knapsack variations (Coin Change Problems)
  2. Module 18: Longest Common Subsequence DP
  3. Module 18.5: Practice Day 01
  4. Module 19: LCS Variations (Longest Common Substring, Printing Longest Common Subsequence, Shortest Common Supersequence, Printing Shortest Common Supersequence, Longest Palindromic Subsequence, Longest Repeating Subsequence)
  5. Module 19.5: Practice Day 02

- 6. Module 20: Assignment 04
- 6. Week 06 - Backtracking and Greedy Basic
  - 1. Module 21: Backtracking and Subset Generation
  - 2. Module 22: Greedy Approach
  - 3. Module 22.5: Practice Day 01
  - 4. Module 23: Problem Solving with Backtracking and Greedy
  - 5. Module 23.5: Practice Day 02
  - 6. Module 24: Final Exam