⚠ You must be enrolled in the course to see course content.

Additional Information for Week 1

What is Programming Competition? (*.pdf)

Rules of Programming Competitions (*.pdf)

Benefits of Participation (*.pdf)

Algorithmic Programming Competitions (*.pdf)

Problem Example. Training Resources And Online Contests (*.pdf)

Additional Information for Week 2

Big O Notation. Computational Complexity(*.pdf)

Linear Data Structures Overview (*.pdf)

Vector (*.pdf)

List (*.pdf)

Stack. Queue. Deque (*.pdf)

Additional Information for Week 3

Introduction to Sorting (*.pdf)

Insertion Sort (*.pdf)

When to Sort? Optimality to Sorted Sequences (*.pdf)

Quicksort (*.pdf)

Quicksort Modifications (*.pdf)

Mergesort (*.pdf)

Additional Information for Week 4

Lower Bound. Stable Sorting. Comparators (*.pdf)

Integer Sorting (*.pdf)

Sorting: Guidelines for Standard Libraries (*.pdf)

Introduction to Binary Search (*.pdf)

Implementations of Binary Search (*.pdf)

Priority Queue and Binary Heap (*.pdf)

Additional Information for Week 5

Introduction to Graphs (*.pdf)

Graphs: Representations in Memory (*.pdf)

Introduction to Depth First Search (*.pdf)

Depth First Search with Timestamps (*.pdf)

Topological Sort (*.pdf)

Introduction to Dynamic Programming (*.pdf)

Additional Information for Week 6

Eulerian Paths And Eulerian Tours (*.pdf)

Hamiltonian Paths And Hamiltonian Tours (*.pdf)

Breadth First Search (*.pdf)

Single Source Shortest Paths (*.pdf)

All Pair Shortest Paths (*.pdf)