

# Course Overview

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1. Motivation
2. Introduction to Disjoint Set DS
3. Disjoint Set Implementation
4. Runtime improvement techniques
  - 4.1. Union by Rank
  - 4.2. Path Compression
5. Implementation of Disjoint Set to
  - 5.1. Detect Cycle in a graph
  - 5.2. find number of connected components in a graph
  - 5.3. find Minimum Spanning Tree