

### Exhaustive Search

1. Travelling Salesperson Problem
2. Knapsack Problem
3. Assignment Problem

\*Discussion on Exponential run time (NP)

Assignment Problem using Hungarian Method (P-time)

Notes shared.

Anany Chapter 3: 3.4

### Backtracking Technique

\*Betterment over exhaustive approach in terms of generating candidate solutions

1. N-Queens Problem
2. Hamiltonian Circuit Problem
3. Sub-Set Sum Problem

(best average worst scenario in producing state space tree in context of N-queens and Hamiltonian Circuit Problem)

Anany chapter 12: 12.1

### Branch and Bound Technique

Optimization Problems (maximization and minimization)

1. Knapsack Problem
2. Assignment Problem
3. Travelling Salesperson Problem

Anany chapter 12: 12.2