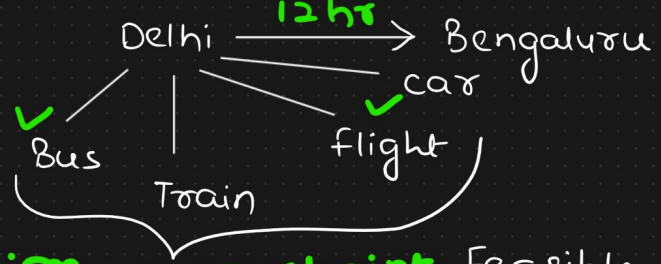
Greedy Algorithms



Application 1) constraint Feasible Solutions

2) maximum profit or Minimum cost

↳ Optimization Problems

1) Greedy Approach
2) Dynamic Programming

1) fractional Knapsack

Obj < Profit, weight

M = 37

min. cost → Bus

↳ optimized solution (single optimized solution)

2) Job sequencing with Deadline

Job < Profit, Deadline

3) Huffman coding → Data compression technique

4) optimal merge pattern

5) Minimum spanning tree < Kruskal, Prim's

6) Single source shortest Path

↳ Dijkstra's Algorithm