

Assignment-2 (CSE356)

1. What is back tracking? Where Back tracking is used to solve the problem.
2. What is the difference between 0/1 Knapsack problem and fractional Knapsack problem?
3. Write down the Bellman Ford Algorithm to solve single source shortest path problem. Write its time complexity.
4. How 4-Queen's problem can be solved using back tracking and explain with an example
5. Define Greedy knapsack. Find the optimal solution of the Knapsack instance $n=7$, $M=15$, $(p_1, p_2, \dots, p_7) = (10, 5, 15, 7, 6, 18, 3)$ and $(w_1, w_2, \dots, w_7) = (2, 3, 5, 7, 1, 4, 1)$.