|  |  |
| --- | --- |
| **Sl.** | **Problem Statement** |
| **1.** | |  | | --- | | Write a program to sort a linear array using the bubble sort algorithm. | |
| **2.** | |  | | --- | | Write a program to find an element using a linear search algorithm. | |
| **3.** | |  | | --- | | Write a program to sort a linear array using the merge sort algorithm. | |
| **4.** | |  | | --- | | Write a program to find an element using the binary search algorithm. | |
| **5.** | |  | | --- | | Write a program to find a given pattern from text using the pattern matching algorithm. | |
| **6.** | |  | | --- | | Write a program to implement a queue data structure along with its typical operations. | |
| **7.** | |  | | --- | | Write a program to solve **n** queen's problem using backtracking. | |
| **8.** | |  | | --- | | Consider a set **S = {5,10,12,13,15,18}** and **d = 30**. Write a program to solve the sum of subset problem. | |
| **9.** | |  | | --- | | Write a program to solve the following **0/1 Knapsack** using dynamic programming approach **profits P = (15,25,13,23), weight W = (2,6,12,9), Knapsack C = 20**, and the number of items **n=4**. | |
| **10** | |  | | --- | | Write a program to solve the **Tower of Hanoi** problem for the **N** disk. | |

**Index**