

Sr.no	Program Title	Page no	Date of Assignment	Date of submission	Signature
1	Write a program to make a matrix and print it.				
2	Write a program to compute the sum of each row in the given matrix and output the answer with row number and its respective sum.				
3	The transpose of a matrix is found by interchanging its rows into columns or columns into rows. The transpose of the matrix is denoted by using the letter "T" in the superscript of the given matrix.				
4	Write a program to check that a matrix is magic or not.				
5	Given a cost matrix <code>cost[][]</code> and a position (m, n) in <code>cost[][]</code> , write an efficient algorithm that returns cost of minimum cost path to reach (m, n) from (0, 0). Each cell of the matrix represents a cost to traverse through that cell. The total cost of a path to reach (m, n) is the sum of all the costs on that path (including both source and destination). You can only traverse down, right and diagonally lower cells from a given cell, i.e., from a given cell (i, j), cells (i + 1, j), (i, j + 1), and (i + 1, j + 1) can be traversed. You may assume that all costs are positive integers.				
6	Pick an element from the array data structure uniformly at random. Uniform means probability in which all outcomes are equally likely i.e. probability that any element will get picked is $\frac{1}{n}$, where n denotes the number of elements in the input array.				
7	Write a program to find maximum element in array.				

8	Write a program to perform the PUSH, POP, STACK-EMPTY and OUTPUT operations				
9	Write a program to find the minimum element in the stack.				
10	Write a program to print element in same order as inserting order in stack.				
11	Write a program to check expression is valid or not using stack.				
12	Write a program to reverse the stack.				
13	Write a program to implement enqueue and dequeue operations in queue.				
14	Write a program to implement linked list.				
15	Write a program to implement a search and delete in linked list.				
16	Write a program to Implement tree Data structure.				
17	Write a program to count leaf nodes In a tree.				
18	. Write a program to perform inorder,preorder and postorder traversal in trees.				
19	Write a program to find maximum and minimum element in BST				
20	Write a program to check tree is BST or not.				

21	Perform DFS in graph				
22	Perform BFS in graph				
23	Write a program for merge sort.				
24	Write a program for heap sort.				
25	Write a program for linear search.				