**SGVU DSA BOOTCAMP**

**DAY 1: Date(14/10/2024)**

ASSIGNMENT 1: IMPLEMENT STACK USING ARRAY ON GITHUB.

ASSIGNMENT 2: REAL LIFE APPLICATIONS OF STACK.

**DAY 2: Date(15/10/2024)**

ASSIGNMENT 1: WRITE A PROGRAM FOR LIFT MANAGEMENT USING QUEUE.

ASSIGNMENT 2: IMPLEMENT QUEUE OPERATION USING ARRAY ON GITHUB.

ASSIGNMENT 3: FIND APPLICATION OF QUEUE, CIRCULAR QUEUE, DEQUE ON INDUSTRIAL BASIS.

**DAY 3: Date(16/10/2024)**

ASSIGNMENT 1: IMPLEMENTATION OF CIRCULAR QUEUE & DEQUE ON GITHUB.

ASSIGNMENT 2: IMPLEMENTATION OF LINKED LIST BASIC OPERATION

1)CREATION 2)INSERTION 3)DELETION 4)DISPLAY ON GITHUB.

**DAY 4: Date(17/10/2024)**

ASSIGNMENT 1: IMPLEMENT STACK USING LINKED LIST ON GITHUB.

ASSIGNMENT 2: IMPLEMENT QUEUE , CIRCULAR QUEUE & DEQUE USING LINKED LIST ON GITHUB.

ASSIGNMENT 3: WHAT IS UNROLLED LINKED LIST TELL ME FIVE APPLICATION OF UNROLLED LINKED LIST

ON INDUSTRY LEVEL.

ASSIGNMENT 4: PRINT A LINKEDLIST IN REVERSE ORDER USING RECURSION.

**DAY 6: Date(21/10/2024)**

ASSIGNMENT 1: EXPLAIN BINARY TREE AND THEIR TYPES BASED ON NUMBER OF LEVEL,

NODES VALUES, NUMBER OF CHILDREN.

ASSIGNMENT 2: PERFORM ALL OPERATION IN BINARY SEARCH TREE USING C ON GITHUB.

1)INSERTION 2)DELETION 3)DISPLAY(INORDER,PREORDER,POSTORDER).

**DAY 7: Date(22/10/2024)**

ASSIGNMENT 1: PERFORM ALL OPERATION OF BINARY SEARCH TREE USING LINKED LIST ON GITHUB.

ASSIGNMENT 2: PERFORM AVL TREE ALL OPERATION USING LINKED LIST ON GITHUB.

**DAY 8: Date(23/10/2024)**

ASSIGNMENT 1: PERFORM GRAPH ALL OPERATION.

ASSIGNMENT 2: IMPLEMENT BFS USING QUEUE ON GITHUB.

ASSIGNMENT 3: IMPLEMENT DIJKSTRA ALGORITHM ON GITHUB.

ASSIGNMENT 4: PERFORM BUBBLE , QUICK, MERGE SORT USING ARRAY.

ASSIGNMENT 5: PERFORM LINEAR , BINARY SEARCH USING ARRAY.

ASSIGNMENT 6: PERFORM KRUSKAL’S ALGORITHM FOR GRAPH.