**LAB ASSIGNMENT #1**

1. WRITE A PROGRAM TO STORE AND DISPLAY RECORDS OF 20 STUDENTS.
2. WRITE A PROGRAM TO FIND THE LARGEST AND SMALLEST NUMBER IN GIVEN LISTS OF NUMBER USING ARRAY.

**LAB ASSIGNMENT #2**

1. WRITE A PROGRAM TO FIND TRANSPOSE MATRIX OF ANY 3\*3 MATRIX.
2. WRITE A PROGRAM TO STORE AND CALCULATE PERCENTAGE AND RANK OF 5 SUBJECTS OF 10 STUDENTS.

**LAB ASSIGNMENT #3**

1. WRITE A PROGRAM TO INSERT TWO ELEMENTS IN GIVEN ARRAY.
2. WRITE A PROGRAM TO MERGE TWO GIVEN ARRAY IN ONE ARRAY.
3. WRITE A PROGRAM TO FIND THE SUM OF PRIME NUMBER FROM 1 TO 100 USING ARRAY AND FUNCTON.

**LAB ASSIGNMENT #4**

1. WRITE A PROGRAM TO FIND THE PRODUCT OF ANY 10 NUMBERS USING POINTER, ARRAY AND FUNCTION.
2. WRITE A PROGRAM TO FIND THE SUM OF ANY TWO 3\*3 MATRIX USING DYNAMIC MEMORY ALLOCATION.

**LAB ASSIGNMENT #5**

WRITE A PROGRAM TO IMPLEMENT THE RECORDS OF STUDENTS’ ADMISSION USING STRUCTURE AND POINTER. INCLUDE:

* 1. ADD
  2. DELETE
  3. DISPLAY

**LAB ASSIGNMENT #6**

WRITE A PROGRAM TO IMPLEMENT “LIBRARY MANAGEMENT SYSTEM” USING FUNCTION, STRUCTURE AND POINTER. INCLUDE:

1. INSERT -> ADD NEW BOOKS
2. DELETE -> REMOVE BOOKS
3. DISPLAY -> DISPLAY RECORDS
4. UPDATE

1ST DSA ASSIGNMENT…………………………………………………………………………………………….

**LAB ASSIGNMENT #7**

WRITE A PROGRAM TO IMPLEMENT STACK (STATIC STACK IMPLEMENTATION). INCLUDE:

1. PUSH
2. POP
3. DISPLAY
4. ISEMPTY
5. ISFULL

**LAB ASSIGNMENT #8**

WRITE A PROGRAM TO CONVERT GIVEN INFIX EXPRESSION INTO POSTFIX EXPRESSION USING STACKS:

* 1. OPERATOR, PARENTHESIS
  2. OPERANDS

**LAB ASSIGNMENT #9**

1. WRITE A PROGRAM TO FIND THE FACTORIAL OF ANY NUMBER USING RECURSION.
2. WRITE A PROGRAM TO FIND THE SUM OF NATURAL NUMBER USING RECURSION.
3. WRITE A PROGRAM TO EVALUATE THE VALUE OF GIVEN EXPRESSION:

+A\*BC

(WHERE, A=5, B=3 AND C=2)

**LAB ASSIGNMENT #10**

WRITE A PROGRAM TO IMPLEMENT LINEAR QUEUE.

**LAB ASSIGNMENT #11**

WRITE A PROGRAM TO IMPLEMENT CIRCULAR QUEUE.

**LAB ASSIGNMENT #12**

WRITE A PROGRAM TO IMPLEMENT CIRCULAR QUEUE USING COUNTER VARIABLE.

**LAB ASSIGNMENT #13**

WRITE A PROGRAM TO IMPLEMENT:

* + 1. ASCENDING PRIORITY QUEUE
       - * OPERATIONS: ENQUEUE, FIND MIN, DELETE MIN

1. DESCENDING PRIORITY QUEUE
   * + - * OPERATIONS: ENQUEUE, FIND MAX, DELETE MAX

**LAB ASSIGNMENT #14**

1. WRITE A PROGRAM TO FIND THE SUM AND SMALLEST VALUES IN THE ARRAY USING POINTER.
2. PREPARE A REPORT ON “LINKED LIST”.
   1. INTRODUCTION
   2. IMPORTANCES
   3. TYPES
   4. CONCLUSION
   5. REFERENCES [IEEE FORMAT]