Data Structures Lab Cycle I

1. Implement Bubblesort algorithm

2. Implement Polynomial addition and multiplication [use array of structures]

3. Implement linear search and print number of comparisons

4. Implement binary search and print number of comparisons (use iterative and recusive functions)

5. Implement Stack using arrays and its operations

6. Read a string and print its reverse using arrays

7. Implement a C program to check a given expression is valid by balanced bracket using stack and find index of closing bracket for a given opening bracket in an expression.

8. Implement Queue using arrays and its operations

9. Implement Circular Queue using arrays and its operations

10. Implement Sparse matrix transpose operations.

11. Implement a C program for converting an infix expression to postfix form and evaluate the postfix expression using stack. Program should support for both parenthesized and free parenthesized expressions with the operators: +, -, *, /, %(Remainder), ^(Power) and alphanumeric operands.

12. Implement infix to prefix conversion using Stack