



## **TRF LEVEL 2 ELECTRICAL DOMAIN TASK - 1**

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### **TASK – 1.1**

1. Write algorithm for
  - a. Infix expression to prefix.
  - b. Infix expression to postfix.
  - c. Write code for balance bracket.
2. Given “n” ropes of different lengths, connect them into a single rope with minimum cost. Assume that the cost to connect two ropes is the same as the sum of their lengths.  
(Hint: Use Priority Queue)
3. Implement binary search tree

### **TASK – 1.2**

You are supposed to complete these tasks in Proteus.

- 1) Construction of gates using NAND and NOR - @member1
- 2) Design D flip flop using logic gates - @member2
- 3) Construct JK flip flop using D flip flop - @member3
- 4) 4 bit adder using gates - @member4
- 5) S-R flip-flop Using NAND gate - @member5

**Deadline: 17<sup>th</sup> September 22**

**Make sure you follow the deadline strictly.**