## Assignment 3/ June 7, 2016/ Batch 1

- 1. Sort a stack using Recursion.
- 2. Read about Pointers, Structures and Manipulation of Structures.
- 3. Execute and write a program to find all the permutations of a string.

  Example: 'abc' is a string then abc, bac, cba, acb, bca, cab are its 6 permutations.
- 4. Implement a Circular Queue (Take Special Care of Underflow and Overflow Conditions.)
- 5. Print the binary representation of all the numbers from 1 to n using Queue.
- 6. Petrol Pump Problem: As discussed in Class there are n Petrol Pumps in a circular path. You are given amount of petrol present at each pump as well as distance between them. Write a code for finding if a motorbike will be able to make circular tour in given circumstances? Assume Initial Petrol amount to be zero.
- 7. Study about Priority Queue.
- 8. Study about double ended queue.
- 9. You are given a square matrix. Rotate it by 90 Degrees. Do not use any extra space.
- 10. Implement a Queue using a stack.

Note: Repeat Question 2 of Yesterday's Homework.