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**Course Name: Computer Lab 201 (Data Structure)**

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#### **Assignment 4:**

##### **Problem 1: Implement Stack using an array.**

- I. **Take an array of structures that includes n student records. Each student record consists of student name, roll no, and marks.**
- II. **Implement the following functions:**
  - A. *Push ()* // to push an element in the array
  - B. *Pop()*: // to remove an element from the array
  - C. *Top()*: // to return the last inserted element without removing it.
  - D. *Size()*: // to return the number of elements stored in the stack.
  - E. *int IsEmptyStack()*: // to check whether any elements are stored in the stack or not.  
If empty print "Stack is underflow".
  - F. *int IsFullStack()*: // to check whether the stack is full or not.  
If full print "Stack is overflow".
- III. **Now implement a menu-driven program that consists of the following options:**
  - A. Push a student record
  - B. Pop a student record
  - C. Display all student records
  - D. Exit

##### **Problem 2: Implement the same stack (problem 1) Using Linked List.**

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