# CL2001 – Data Structure Lab

# Exercise # 03

**Note:**

- Copied task will be awarded **zero** marks.
- Use comments wherever applicable.
- Note that these lab task marks could be graded through a viva in lab.
- Submit a pdf file containing all of your C++ code with all possible screenshots of every task outputs on Google Classroom. The name of file should be your roll no followed by your name (roll-no-name.pdf) i.e  (22P-8743-Zain.pdf).

## Problem: 1 | List ADT Implementation (via dynamic array)

Implement the following operations of List ADT by using array class

1. Constructor and Destructor.
2. void insert(x)
3. void insertAt(x,loc)
4. void printList()
5. void searchElement(x)
6. void deleteElement(x)
7. void reverseList()
8. void sort()
9. bool isFull()
10. bool isEmpty()
11. void emptyList ( )

*Note:*

Write a driver (main) program to test your code (provide menu for all operations).

Use pointer notation instead of array indexes.