Lab – 03

02/02/2025

List ADT - Array Implementation

Note:

1. Use only visual studio code type your program and run your code.
2. Always follow industry coding best practices.

1. Write a C++ menu-driven program to implement List ADT using an array of size 5. Maintain proper boundary conditions and follow good coding practices. The List ADT has the following operations,

   1. Insert Beginning
   2. Insert End
   3. Insert Position
   4. Delete Beginning
   5. Delete End
   6. Delete Position
   7. Search
   8. Display
   9. Rotate
   10. Exit

The rotate option takes an input 'k' which rotates the entire array to the right by k times. Think of at least 3 solutions. Think of a solution that rotates using O(1) extra space.

Example:

Input: nums = [1,2,3,4,5], k = 2
Output: [4,5,1,2,3]
Explanation:
rotate 1 steps to the right: [5,1,2,3,4]
rotate 2 steps to the right: [4,5,1,2,3]

Files to be submitted

1. List CPP file (.cpp)