



University of Central Punjab

Faculty of Information Technology

Data Structures and Algorithms (DSA)

Section F Graded Lab 1

Task 1:

Implement a class “myArray” which can perform the following methods(functions)

- **to insert data in array** // insert value at 0th index if array is empty, if array has single element then insert on 1st index and so on. Increment the value of index, return true if value inserted otherwise false.
bool insert(int value)
- **to delete data from right** // delete the element from the right of the array and also decrement the value of index and return true otherwise return false
bool delete_right()
- **to delete data from left** // delete the element from the left of the array and also move other elements i.e delete the data from 0th index and then move the data of 1st index to the 0th and so on and return true otherwise return false
bool delete_left()
- **to display all elements of an array**
void display()
- **to search an element** // return true if value exists in an array otherwise false, print index in main
bool search(int value, int &index)

In this task, you will implement a menu in main function e.g.

Press 1 for Insertion

Press 2 for Deletion from right

Press 3 for Deletion from left

Press 4 to display data

Press 5 to search an element
