UCT403 Data Structures and Algorithms Lab Assignment-I

(Single and Two-dimensional Arrays)

1. **Develop a Menu driven program to demonstrate the following operations of Arrays**

——MENU——- 1. CREATE

1. **DISPLAY**
2. **INSERT**
3. **DELETE**
4. **SEARCH (Linear and Binary)**
5. **EXIT**
6. **Design the logic to remove the duplicate elements from an Array and after the deletion, the array should contain the unique elements.**
7. **Bubble Sort is the simplest sorting algorithm that works by repeatedly swapping the adjacent elements if they are in wrong order. Code the Bubble sort with the following elements:**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **64** | **34** | **25** | **12** | **22** | **11** | **90** |

1. Develop a program to find the minimum and maximum elements in an array.
2. Develop the following programs
3. Printing the diagonal, upper and lower diagonal elements of a matrix.
4. Find the row-wise and column-wise sum of all the elements that present in a two-dimensional array.