

Assignment 1

- 1) Develop a Menu driven program to demonstrate the following operations of Arrays:

——MENU——

1. CREATE
 2. DISPLAY
 3. INSERT
 4. DELETE
 5. SEARCH
 6. EXIT
- 2) Implement the Binary search algorithm regarded as a fast search algorithm with run-time complexity of $O(\log n)$ in comparison to the Linear Search.
- 3) Design the logic to remove the duplicate elements from an Array and after the deletion the array should contain the unique elements.
- 4) Implement the logic to:
1. Reverse the elements of an array.
 2. Find Mean, Mode, Median in an array.
 3. Find the Matrix Multiplication.
 4. Find the Transpose of a Matrix.
- 5) Design the logic to find a Missing Number in a Sorted Array.