Array Manipulation

Array create and display algorithm:

1. Start
2. Get the number of elements from the user
3. Create an array of that size
4. Read the elements into the array
5. Print the elements of the array
6. End.

Insertion in array algorithm:

1. Start
2. Get the number of elements from the user
3. Create an array of size n+1
4. Read the elements into the array
5. Get the position and value of the new element to be inserted.
6. Insert the new value at the specified position in the array
7. Print the updated array to the user
8. End.

Deletion from array:

1. Start
2. Get the size of the array and its elements from the user
3. Get the position of the element to be deleted from the user
4. Shift the elements to the left, Starting from the specified position
5. Display the updated array (with the specified element removed to the user)
6. End

Linear Search in array:

1. Start
2. Get the size of the array and its elements from the user
3. Get the value to be searched for in the array
4. Use a flag variable to indicate whether the “value is found” in the array
5. Iterate through the array and check if the value matches any element.
6. If the value is found, Set the flag to 1 and break out of the loop
7. If the flag is 1, Print “value if found”; Otherwise print “value not found”
8. End.