**Aim:**

To perform basic operations on arrays such as insertion, deletion, traversal, and searching in C.

**Common Array Operations:**

1. **Traversal** — Accessing and printing each element.
2. **Insertion** — Adding an element at a specific position.
3. **Deletion** — Removing an element from a specific position.
4. **Searching** — Finding whether an element exists and its index.
5. **Updating** — Changing the value of an element.

**Algorithms:**

**1. Traversal:**

* Start from first element
* Visit each element till the last
* Print the element

**2. Insertion at position**pos**:**

* Move all elements from pos to the right by one position
* Insert the new element at pos

**3. Deletion at position**pos**:**

* Move all elements from pos+1 to the left by one position
* Decrease array size by one

**4. Searching for an element**key**:**

* Check each element from start to end
* If found, return position
* Else, return not found
* **Sample Output:**
* Enter number of elements: 5
* Enter 5 elements:
* 10 20 30 40 50
* Array elements are: 10 20 30 40 50
* Enter position to insert (1 to 6): 3
* Enter element to insert: 25
* Array after insertion: 10 20 25 30 40 50
* Enter position to delete (1 to 6): 4
* Array after deletion: 10 20 25 40 50
* Enter element to search: 40
* Element 40 found at position 4

