

Ques. Write a C program to implement Array operation such as insert, delete and display.

Aim: To write a C program to implement Array operations such as insert, delete and display.

### Algorithm:

- \* Start.
- \* Input the size and elements of the array.
- \* Provide a menu for insert, delete, and display.
- \* Perform the chosen operation.
- \* Repeat until exit.
- \* Stop.

### Program:

```
#include <stdio.h>

int main() {
    int a[100], n, i, pos, val, choice;
    printf("Enter number of elements: ");
    scanf("%d", &n);
    printf("Enter elements: ");
    for (i=0; i<n; i++)
        scanf("%d", &a[i]);
    printf("1. Insert 2. Delete 3. Display\n");
    scanf("%d", &choice);

    if (choice==1) {
        printf("Enter position and value: ");
        scanf("%d %d", &pos, &val);
        for (i=n; i>=pos; i--)
            a[i] = a[i-1];
        a[pos] = val;
        n++;
    }

    else if (choice==2) {
        printf("Enter position to delete: ");
        scanf("%d", &pos);
        for (i=pos+1; i<n; i++)
            a[i] = a[i+1];
        n--;
    }
}
```

```
printf("Array:");  
for(i=0; i<n; i++)  
    printf("%d", a[i]);  
return 0;
```

3

### Output:

Enter number of elements: 2

Enter elements: 1 2

1. insert 2. delete 3. Display

1

Enter position and value: 1 1

Array: 1 1 2

Result: thus, the program executed successfully.