Aim:

To identify duplicate elements in an array.

Algorithm:

1. Read the array.

2. Compare each element with others.

3. If duplicates found, print.

C Code:

```c
#include <stdio.h>

int main() {
    int a[100], n, i, j;
    printf("Enter size of array: ");
    scanf("%d", &n);
    printf("Enter elements:\n");
    for (i = 0; i < n; i++)
        scanf("%d", &a[i]);

    printf("Duplicate elements: ");
    for (i = 0; i < n; i++) {
        for (j = i + 1; j < n; j++) {
            if (a[i] == a[j]) {
                printf("%d ", a[i]);
                break;
            }
        }
    }
    return 0;
}
```

Input:
[1 2 3 2 4 5 1]

Output:

```
Duplicate elements: 1 2

=== Code Execution Successful ===
```

Result:

Successfully detects duplicates.