//Find duplicate elements in an array

/*Given an array of n integers. The task is to print the duplicates in the given array. If there are no duplicates then print -1.

Examples:
Input: {2, 10,10, 100, 2, 10, 11,2,11,2}
Output: 2 10 11
Input: {5, 40, 1, 40, 100000, 1, 5, 1}
Output: 5 40 1*/

Code:

```
#include <stdio.h>

int main() {
    int n;


    printf("Enter the number of elements: ");
    scanf("%d", &n);

    int arr[n];
    int duplicates[n];
    int duplicateCount = 0;

    printf("Enter the elements of the array:\n");
    for (int i = 0; i < n; i++) {
        scanf("%d", &arr[i]);
    }

    //Find duplicates
    for (int i = 0; i < n; i++) {
        // Check if the element is already in dupli arr
        int isDuplicate = 0;
        for (int j = 0; j < duplicateCount; j++) {
            if (arr[i] == duplicates[j]) {
                isDuplicate = 1; // Elementbalready recorded as a dupli
                break;
            }
```

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        }

        // If it's a new duplic, check against original arr
        if (!isDuplicate) {
            for (int j = i + 1; j < n; j++) {
                if (arr[i] == arr[j]) {
                    duplicates[duplicateCount++] = arr[i]; // Add to dupli arr
                    break;
                }
            }
        }
    }

    //Print dupli or -1 if none found
    if (duplicateCount == 0) {
        printf("-1\n"); // No dupli found
    } else {
        printf("Duplicates: ");
        for (int i = 0; i < duplicateCount; i++) {
            printf("%d ", duplicates[i]); // Print each dupli
        }
        printf("\n");
    }

    return 0;
}
```