

CS23331-DAA-2024-CSE / 1-Finding Duplicates- $O(n^2)$ Time Complexity, $O(1)$ Space Complexity

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Started on	Friday, 24 October 2025, 2:09 PM
State	Finished
Completed on	Friday, 24 October 2025, 2:11 PM
Time taken	2 mins 28 secs
Marks	1.00/1.00
Grade	4.00 out of 4.00 (100%)

Question 1 | Correct Mark 1.00 out of 1.00 Flag question

Find Duplicate in Array.

Given a read only array of n integers between 1 and n , find one number that repeats.

Input Format:

First Line - Number of elements

n Lines - n Elements

Output Format:

Element x - That is repeated

For example:

Input	Result
5 1 1 2 3 4	1

Answer: (penalty regime: 0 %)

```

1 #include <stdio.h>
2
3 int main() {
4     int n;
5     scanf("%d", &n);
6     int arr[n];
7
8     for (int i = 0; i < n; i++) {
9         scanf("%d", &arr[i]);
10    }
11
12    int duplicate = -1;
13
14    for (int i = 0; i < n; i++) {
15        for (int j = i + 1; j < n; j++) {
16            if (arr[i] == arr[j]) {
17                duplicate = arr[i];
18                break;
19            }
20        }
21        if (duplicate != -1)
22            break;
23    }
24
25    printf("%d\n", duplicate);
26
27    return 0;
28 }
29

```

	Input	Expected	Got	
✓	11 10 9 7 6 5 1 2 3 8 4 7	7	7	✓
✓	5 1 2 3 4 4	4	4	✓
✓	5 1 1 2 3 4	1	1	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

