

# Binary search and linear search:

```
#include <stdio.h>
int main() {
    int n, target, i, found = 0;
    printf("Enter number of elements: ");
    scanf("%d", &n);

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

    printf("Enter element to search: ");
    scanf("%d", &target);

    for(i = 0; i < n; i++) {
        if(arr[i] == target) {
            printf("Element found at index %d\n", i);
            found = 1;
            break;
        }
    }
    if(!found) printf("Element not found\n");
    return 0;
}
```

Output:

```
Enter number of elements: 5
Enter elements:
1
2
4
8
9
Enter element to search: 5
Element not found

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

```

#include <stdio.h>
int main() {
    int n, target, i, found = 0;
    printf("Enter number of elements: ");
    scanf("%d", &n);
    int arr[n];
    printf("Enter elements:\n");
    for(i = 0; i < n; i++)
        scanf("%d", &arr[i]);
    printf("Enter element to search: ");
    scanf("%d", &target);

    for(i = 0; i < n; i++) {
        if(arr[i] == target) {
            printf("Element found at index %d\n", i);
            found = 1;
            break;
        }
    }

    if(!found)
        printf("Element not found\n");

    return 0;
}

```

Output:

### Output

```

Enter number of elements: 4
Enter elements:
1
4
8
0
Enter element to search: 0
Element found at index 3

```

=== Code Execution Successful ===