```c
#include <stdio.h>
int binarySearch(int arr[], int size, int key) {
    int low = 0, high = size - 1;
    while (low <= high) {
        int mid = (low + high) / 2;
        if (arr[mid] == key)
            return mid; // Element found
        else if (arr[mid] < key)
            low = mid + 1;
        else
            high = mid - 1;
    }
    return -1; // Element not found
}
int main() {
    int arr[100], n, i, key, result;
    printf("Enter the number of elements: ");
    scanf("%d", &n);
    printf("Enter %d elements in sorted order:\n", n);
    for (i = 0; i < n; i++)
        scanf("%d", &arr[i]);
    printf("Enter the number to search: ");
    scanf("%d", &key);
    result = binarySearch(arr, n, key);
    if (result == -1)
        printf("Element not found in the array.\n");
    else
        printf("Element found at position %d (index %d).\n", result + 1, result);
    return 0;
}
```