```
#include <stdio.h>
int main() {
    int arr[100], n, key;
    int low, high, mid, found = 0;
    printf("Enter number of elements: ");
    scanf("%d", &n);
    printf("Enter elements in sorted order:\n");
    for (int i = 0; i < n; i++) {
        scanf("%d", &arr[i]);
    }
    printf("Enter element to search: ");
    scanf("%d", &key);
    low = 0;
    high = n - 1;
    while (low <= high) {
        mid = (low + high) / 2;
```

```
scanf("%d", &key);
low = 0;
high = n - 1;
while (low <= high) {
    mid = (low + high) / 2;
    if (arr[mid] == key) {
        printf("Element %d found at position %d.\n", key, mid + 1);
        found = 1;
        break;
    } else if (arr[mid] < key) {</pre>
        low = mid + 1;
    } else {
        high = mid - 1;
    }
}
if (!found)
    printf("Element %d not found in the array.\n", key);
return 0;
```

```
Enter number of elements:

5
Enter elements in sorted order:

2
4
6
8
10
Enter element to search: 4
Element 4 found at position 2.
```