

main.c

Share

Run

```
1 #include <stdio.h>
2 int main() {
3     int a[20], i, n, k, low, high, mid, flag = 0;
4     printf("Enter number of elements: ");
5     scanf("%d", &n);
6     printf("Enter elements in sorted order:\n");
7     for (i = 0; i < n; i++) {
8         scanf("%d", &a[i]);
9     }
10    printf("Enter search element: ");
11    scanf("%d", &k);
12    low = 0;
13    high = n - 1;
14    while (low <= high) {
15        mid = (low + high) / 2;
16        if (a[mid] == k) {
17            flag = 1;
18            break;
19        } else if (k < a[mid]) {
20            high = mid - 1;
21        } else {
22            low = mid + 1;
23        }
24    }
25    if (flag) {
26        printf("%d found at position %d\n", k, mid + 1);
```

Output

Clear

Enter number of elements: 5
Enter elements in sorted order:
10 20 30 40 50
Enter search element: 20
20 found at position 2

=== Code Execution Successful ===

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```
7-  for (i = 0; i < n; i++) {
8-      scanf("%d", &a[i]);
9-  }
10-  printf("Enter search element: ");
11-  scanf("%d", &k);
12-  low = 0;
13-  high = n - 1;
14-  while (low <= high) {
15-      mid = (low + high) / 2;
16-      if (a[mid] == k) {
17-          flag = 1;
18-          break;
19-      } else if (k < a[mid]) {
20-          high = mid - 1;
21-      } else {
22-          low = mid + 1;
23-      }
24-  }
25-  if (flag) {
26-      printf("%d found at position %d\n", k, mid + 1);
27-  } else {
28-      printf("Not present\n");
29-  }
30-  return 0;
31- }
32-
```

Output

Clear

Enter number of elements: 5
Enter elements in sorted order:
10 20 30 40 50
Enter search element: 20
20 found at position 2

=== Code Execution Successful ===