

binary_search.c

```
1 #include <stdio.h>
2 int main() {
3     int n, search, c, first, last, middle;
4     printf("Enter number of elements\n");
5     scanf("%d", &n);
6     int array[n];
7     printf("Enter %d integers\n", n);
8     for (c = 0; c < n; c++)
9         scanf("%d", &array[c]);
10    printf("Enter value to find\n");
11    scanf("%d", &search);
12    first = 0;
13    last = n - 1;
14    middle = (first + last)/2;
15    while (first <= last) {
16        if (array[middle] < search)
17            first = middle + 1;
18        else if (array[middle] == search) {
19            printf("%d found at index %d\n", search, middle);
20            break;
21        }
22        else
23            last = middle - 1;
24        middle = (first + last)/2;
25    }
26    if (first > last)
27        printf("Not found! %d isn't present in the list.\n", search);
28    return 0;
29 }
```