

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 }
30
```