



main.c

```
1 #include <stdio.h>
2 int binarySearch(int a[], int beg, int end, int val)
3 {
4     int mid;
5     if(end >= beg)
6     {
7         mid = (beg + end)/2;
8         if(a[mid] == val)
9         {
10             return mid+1;
11         }
12         else if(a[mid] < val)
13         {
14             return binarySearch(a, mid+1, end, val);
15         }
16         else
17         {
18             return binarySearch(a, beg, mid-1, val);
19         }
20     }
21     return -1;
22 }
23 int main() {
24     int a[] = {11, 14, 25, 30, 40, 41, 52, 57, 70};
25     int val = 40;
26     int n = sizeof(a) / sizeof(a[0]);
27     int res = binarySearch(a, 0, n-1, val);
28     printf("The elements of the array are - ");
29     for (int i = 0; i < n; i++)
30     {
31         printf("%d ", a[i]);
32     }
33     printf("\nElement to be searched is - %d", val);
34     if (res == -1)
35     {
36         printf("\nElement is not present in the array");
37     }
38     else
39     {
40         printf("\nElement is present at %d position of array", res);
41     }
42 }
```

Output

/tmp/9qY4wzXgLK.o
The elements of the array are - 11 14 25 30 40 41 52 57 70
Element to be searched is - 40
Element is present at 5 position of array

=== Code Execution Successful ===

33°



Search

