```c
#include <stdio.h>

int binarySearch(int[], int, int);

int main()
{
    int a[10],n,i,key,result;
    printf("\nEnter size of array:");
    scanf("%d",&n);
    printf("\nEnter elements into array:");
    for(i=0;i<n;i++)
    scanf("%d",&a[i]);
    printf("Enter the element to search: ");
    scanf("%d", &key);

    result = binarySearch(a,n,key);

    if (result != -1)
 {
        printf("Element %d found at index %d\n",key , result);
    }
 else
 {
        printf("Element %d not found in the array\n",key);
    }

    return 0;
}
int binarySearch(int a[], int n, int key)
{
    int low,high,mid;
 low = 0;
 high= n-1;

    while (low <= high)
 {
        mid = (low + high)/ 2;

        // Check if key is present at mid
        if (a[mid] == key)
  {
            return mid;
        }

        // If key is greater, ignore the lower half
        if (a[mid] < key)
  {
            low = mid + 1;
        }
        // If key is smaller, ignore the upper half
        else
  {
            high= mid - 1;
        }
    }

    // key is not present in the array
    return -1;
}
```