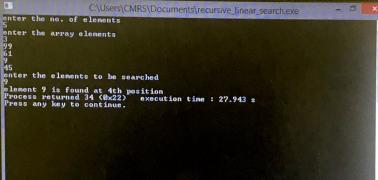File   Edit   View   Search   Project   Build   Debug   Fortran   wxSmith   Tools   Tools+   Plugins   DoxyBlocks   Settings   Help

toh.c X | fib.c X | gcd.c X | recursive_linear_search.c X | recursive_binary_search.c X | *bubble_sort.c X | selection_sort.c X | r.c X

```c
#include<stdio.h>
#include<stdlib.h>
int linear(int a[], int, int);
void main()
{
        int n, i, a[10], key, pos = 0;
        printf("enter the no. of elements\n");
        scanf("%d",&n);
        printf("enter the array elements\n");
        for(i=0;i<n;i++)
        {
                scanf("%d",&a[i]);
        }
        printf("enter the elements to be searched\n");
        scanf("%d",&key);
        pos = linear(a, n, key);
        if(pos != 0)
        {printf("element %d is found at %dth position",key, pos);
        }
        else
        { printf("element not found\n");
        }
}
 int linear(int a[], int n, int key)
{
        if(n>=0)
        {
                if(a[n-1] == key)
                {return n;
                }
                else
                {
                        return linear(a, n-1, key);
                }
                n--;
        }
```

```
C:\Users\CMRS\Documents\recursive_linear_search.exe
enter the no. of elements
5
enter the array elements
3
99
61
9
45
enter the elements to be searched
9
element 9 is found at 4th position
Process returned 34 (0x22)   execution time : 27.943 s
Press any key to continue.
```

toh.c X | fib.c X | gcd.c X | recursive_linear_search.c X | *recursive_binary_search.c X | *bubble_sort.c X | selection_sort.c X

```c
#include<stdio.h>
#include<conio.h>
void main()
{   int a[10],n,i,j,temp;
    int beg,end,mid,target;
    printf("enter the total numbers:");
    scanf("%d",&n);
    printf("enter the array elements:" );
    for(i=0;i<n;i++)scanf("%d",&a[i]);
    for(i=0;i<n-1;i++)
    { for(j=0;j<n-i-1;j++)
        {

            if(a[j+1]<a[j])
            {
                temp=a[j];
                a[j]=a[j+1];
          a[j+1]=temp;
             }}}
    printf("the sorted numbers are:");
    for(i=0;i<n;i++)
    printf("%4d",a[i]);
    beg=a[0];
    end=a[9];
    mid=(beg+end)/2;
    printf("\nenter the number to be searched:");
    scanf("%d",&target);
    while(beg<=end && a[mid]!=target)
    {
        if(target<a[mid]) end=mid-1;else beg=mid+1;
        mid=(beg+end)/2;}if(a[mid]==target)
        { printf("\nthe number is found at position %2d",mid);
        }
        else
        {printf("\nthe number is not found:");
        }
```

```
C:\Users\CMRS\Documents\recursive_binary_search.exe
enter the total numbers:5
enter the array elements:
4
55
11
77
6
the sorted numbers are:    4    6    11    55    77
 enter the number to be searched
:55

the number is not found:
Process returned 25 (0x19)    execution time : 13.690 s
Press any key to continue.
```