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nonRecursiveBinarySearch.c - Code::Blocks 20.03
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<global>
binary_search.c x nonRecursiveBinarySearch.c x quick_sort.c x
1 // BE2005F062 AKASH SHRIDHARAN
2 #include<stdio.h>
3
4 int main()
5 {
6     int arr[50],i,n,x,flag=0,first,last,mid;
7
8     printf("Enter size of array:");
9     scanf("%d",&n);
10    printf("\n Enter array element(ascending order)\n");
11
12    for(i=0;i<n;++i)
13        scanf("%d",&arr[i]);
14
15    printf("\nEnter the element to search:");
16    scanf("%d",&x);
17
18    first=0;
19    last=n-1;
20
21    while(first<=last)
22    {
23        mid=(first+last)/2;
24
25        if(x==arr[mid]){
26            flag=1;
27            break;
28        }
29        else
30            if(x>arr[mid])
31                first=mid+1;
32            else
33                last=mid-1;
34    }
35
36    if(flag==1)
```

```
C:\Users\akash\Desktop\5th_sem_books&PPTs\DAA\lab-works\nonRecursiveBinarySearch.exe
Enter size of array:5
Enter array element(ascending order)
1
5
64
34
62
Enter the element to search:64
Element found at position 3
Process returned 0 (0x0)   execution time : 40.200 s
Press any key to continue.
```

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<global>
S C

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10 printf("\n Enter array element(ascending order)\n");
11
12 for(i=0;i<n;++i)
13     scanf("%d",&arr[i]);
14
15 printf("\nEnter the element to search:");
16 scanf("%d",&x);
17
18 first=0;
19 last=n-1;
20
21 while(first<=last)
22 {
23     mid=(first+last)/2;
24
25     if(x==arr[mid]){
26         flag=1;
27         break;
28     }
29     else
30         if(x>arr[mid])
31             first=mid+1;
32         else
33             last=mid-1;
34 }
35
36 if(flag==1)
37     printf("\nElement found at position %d",mid+1);
38 else
39     printf("\nElement not found");
40
41 return 0;
42 }
43
```

```
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Enter size of array:5
Enter array element(ascending order)
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