

binary_search.c - Code::Blocks 20.03

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

<global> binarySearch(int arr[], int l, int r, int x) : int

```
1 // BE20F05E062 Akash Shridharan
2 #include<stdio.h>
3 int binarySearch(int arr[], int l, int r, int x)
4 {
5     if (r >= 1)
6     {
7         int mid = 1 + (r - 1)/2;
8
9         if (arr[mid] == x) return mid;
10        if (arr[mid] > x) return binarySearch(arr, l, mid-1, x);
11
12        return binarySearch(arr, mid+1, r, x);
13    }
14
15    return -1;
16 }
17
18 int main(void)
19 {
20     int arr[] = {2, 3, 4, 10, 40};
21     int n = sizeof(arr)/ sizeof(arr[0]);
22     int x = 10;
23     int result = binarySearch(arr, 0, n-1, x);
24     (result == -1)? printf("Element is not present in array")
25                  : printf("Element is present at index %d", result);
26
27     return 0;
28 }
29
30
```

C/C++ Windows (CR+LF) WINDOWS-1252 Line 16, Col 1, Pos 337 Insert Read/Write defa...

C:\Users\akash\Desktop\5th_sem_books&PPTs\DAA\DAA-lab-works\binary_search.exe

```
Element is present at index 3
Process returned 0 (0x0)   execution time : 0.048 s
Press any key to continue.
```