File   Edit   Source   Refactor   Navigate   Search   Project   Run   Window   Help

Package Explorer ×

- ✓ > binarySearch [indium_javabootcamp-batch1 main]
  - > JRE System Library [JavaSE-17]
  - ✓ > src
    - ✓ assignment3
      - > BinarySearch.java

BinarySearch.java ×

```java
1  package assignment3;
2
3  import java.util.Scanner;
4
5  public class BinarySearch {
6
7      public static int binarySearch(int[] arr, int key) {
8          int left = 0;
9          int right = arr.length - 1;
10
11         while (left <= right) {
12             int mid = left + (right - left) / 2;
13
14             if (arr[mid] == key) {
15                 return mid; // Found the key at index 'mid'
16             } else if (arr[mid] < key) {
17                 left = mid + 1; // Search in the right half
18             } else {
19                 right = mid - 1; // Search in the left half
20             }
21         }
22
23         return -1; // Key not found
24     }
25
26     public static void main(String[] args) {
27         Scanner scanner = new Scanner(System.in);
```

Task List ×

Find   ▸ All ▸ Activate...

ⓘ **Connect Mylyn**

Connect to your task and ALM tools o
create a local task.

Outline ×

- assignment3
- ✓ BinarySearch
  - binarySearch(int[], int) : int
  - main(String[]) : void

Problems ● Javadoc Declaration Console ×

<terminated> BinarySearch [Java Application] C:\Program Files\Java\jdk-17\bin\javaw.exe (01-Sep-2023, 7:57:33 am – 7:58:00 am) [pid: 17052]
Enter the number of values in the array: 3
Enter the values in sorted order:
5
10
15
Enter the search key: 10

File   Edit   Source   Refactor   Navigate   Search   Project   Run   Window   Help

Package Explorer ×

- binarySearch [indium_javabootcamp-batch1 main]
  - JRE System Library [JavaSE-17]
  - src
    - assignment3
      - BinarySearch.java

BinarySearch.java ×

```java
26    public static void main(String[] args) {
27        Scanner scanner = new Scanner(System.in);
28
29        System.out.print("Enter the number of values in the array: ");
30        int n = scanner.nextInt();
31
32        int[] values = new int[n];
33
34        System.out.println("Enter the values in sorted order:");
35        for (int i = 0; i < n; i++) {
36            values[i] = scanner.nextInt();
37        }
38
39        System.out.print("Enter the search key: ");
40        int searchKey = scanner.nextInt();
41
42        int result = binarySearch(values, searchKey);
43
44        if (result != -1) {
45            System.out.println("Key found at index: " + result);
46        } else {
47            System.out.println("Key not found in the array.");
48        }
49
50        scanner.close();
51    }
```

Task List ×

Find   ▸ All ▸ Activate...

Connect Mylyn

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create a local task.

Outline ×

- assignment3
- BinarySearch
  - binarySearch(int[], int) : int
  - main(String[]) : void

Problems   Javadoc   Declaration   Console ×

\<terminated\> BinarySearch [Java Application] C:\Program Files\Java\jdk-17\bin\javaw.exe (01-Sep-2023, 7:57:33 am – 7:58:00 am) [pid: 17052]

```
Enter the number of values in the array: 3
Enter the values in sorted order:
5
10
15
Enter the search key: 10
```

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