```
package datastructure.Search;
public class BinarySearch {
    int binarySearch(int[] arr, int low, int high, int x) {
        if (high >= low) {
            int mid = low + (high - low) / 2;
            if (arr[mid] == x)
                return mid;
            if (arr[mid] > x)
                return binarySearch(arr, low, mid - 1, x);
            return binarySearch(arr, mid + 1, high, x);
        }
        return -1;
    }

    public static void main(String[] args) {
        BinarySearch obj = new BinarySearch();
        // index      0  1  2   3  4   5   6
        int arr[] = { 2, 5, 8, 10, 15, 20, 30 };
        int high = arr.length - 1;
        int result = obj.binarySearch(arr, 0, high, 8);
        if (result == -1)
            System.out.println("Element not present");
        else
            System.out.println("Element found at index " + result);
    }

}
```