

```

1 // Copyright © 2020 AlgoExpert, LLC. All rights reserved.
2
3 // O(log(n)) time | O(1) space
4 function shiftedBinarySearch(array, target) {
5   return shiftedBinarySearchHelper(array, target, 0, array.length - 1)
6 }
7
8 function shiftedBinarySearchHelper(array, target, left, right) {
9   while (left <= right) {
10     const middle = Math.floor((left + right) / 2);
11     const potentialMatch = array[middle];
12     const leftNum = array[left];
13     const rightNum = array[right];
14     if (target === potentialMatch) {
15       return middle;
16     } else if (leftNum <= potentialMatch) {
17       if (target < potentialMatch && target >= leftNum) {
18         right = middle - 1;
19       } else {
20         left = middle + 1;
21       }
22     } else {
23       if (target > potentialMatch && target <= rightNum) {
24         left = middle + 1;
25       } else {
26         right = middle - 1;
27       }
28     }
29   }
30   return -1;
31 }
32
33 exports.shiftedBinarySearch = shiftedBinarySearch;

```

```
1 function shiftedBinarySearch(array, target) {
2   // Write your code here.
3 }
4
5 // Do not edit the line below.
6 exports.shiftedBinarySearch = shiftedBinarySearch;
7
```

Submit Code

```
10 # Test Case 40: Success (1:1)
11 # Test: expect_program_output(matches("200, 10, 10, 200, 10"))
12 #
13
14 # Test Case 41: Success (1:1)
15 # Test: expect_program_output(matches("200, 10, 10, 200, 10"))
16 #
17
18 # Test Case 42: Success (1:1)
19 # Test: expect_program_output(matches("200, 10, 10, 10, 10, 10, 10, 10, 10, 10"))
20 #
21
22 # Test Case 43: Success (1:1)
23 # Test: expect_program_output(matches("200, 10, 10, 10, 10, 10, 10, 10, 10, 10"))
24 #
```

Run or submit code when you're ready.