

PromptScratchpadOur Solution(s)Video Explanation

Run Code

Solution 1Solution 2

```
1 // Copyright © 2020 AlgoExpert, LLC. All rights reserved.
2
3 // O(log(n)) time | O(1) space
4 function searchForRange(array, target) {
5   const finalRange = [-1, -1];
6   alteredBinarySearch(array, target, 0, array.length - 1, finalRange, true);
7   alteredBinarySearch(array, target, 0, array.length - 1, finalRange, false);
8   return finalRange;
9 }
10
11 function alteredBinarySearch(array, target, left, right, finalRange, goLeft) {
12   while (left <= right) {
13     const mid = Math.floor((left + right) / 2);
14     if (array[mid] < target) {
15       left = mid + 1;
16     } else if (array[mid] > target) {
17       right = mid - 1;
18     } else {
19       if (goLeft) {
20         if (mid === 0 || array[mid - 1] !== target) {
21           finalRange[0] = mid;
22           return;
23         } else {
24           right = mid - 1;
25         }
26       } else {
27         if (mid === array.length - 1 || array[mid + 1] !== target) {
28           finalRange[1] = mid;
29           return;
30         } else {
31           left = mid + 1;
32         }
33       }
34     }
35   }
36 }
37
38 exports.searchForRange = searchForRange;
39
```