

Our Solution(s)

Run Code

Your Solutions

Run Code

Solution 1

```
1 // Copyright © 2020 AlgoExpert, LLC. All rights reserved.
2
3 package main
4
5 // Best: O(n) time | O(1) space
6 // Average: O(n) time | O(1) space
7 // Worst: O(n^2) time | O(1) space
8 func Quickselect(array []int, k int) int {
9     return helper(array, 0, len(array)-1, k-1)
10 }
11
12 func helper(array []int, start, end int, position int) int {
13     for {
14         if start > end {
15             panic("This should never happen!")
16         }
17         pivot, left, right := start, start+1, end
18         for left <= right {
19             if array[left] > array[right] && array[right] < array[pivot] {
20                 swap(left, right, array)
21             }
22             if array[left] <= array[pivot] {
23                 left += 1
24             }
25             if array[right] >= array[pivot] {
26                 right -= 1
27             }
28         }
29         swap(pivot, right, array)
30         if right == position {
31             return array[right]
32         } else if right < position {
33             start = right + 1
34         }
35     }
36 }
```

Our Tests

Solution 1 Solution 2 Solution 3

```
1 package main
2
3 func Quickselect(array []int, k int) int {
4     // Write your code here.
5     return -1
6 }
7
```

Custom Output

Submit Code

```
11 def is_prime(n):
12     if n < 2:
13         return False
14     for i in range(2, int(n**0.5) + 1):
15         if n % i == 0:
16             return False
17     return True
18
19 def is_prime(n):
20     if n < 2:
21         return False
22     for i in range(2, int(n**0.5) + 1):
23         if n % i == 0:
24             return False
25     return True
26
27 def is_prime(n):
28     if n < 2:
29         return False
30     for i in range(2, int(n**0.5) + 1):
31         if n % i == 0:
32             return False
33     return True
```

Run or submit code when you're ready.