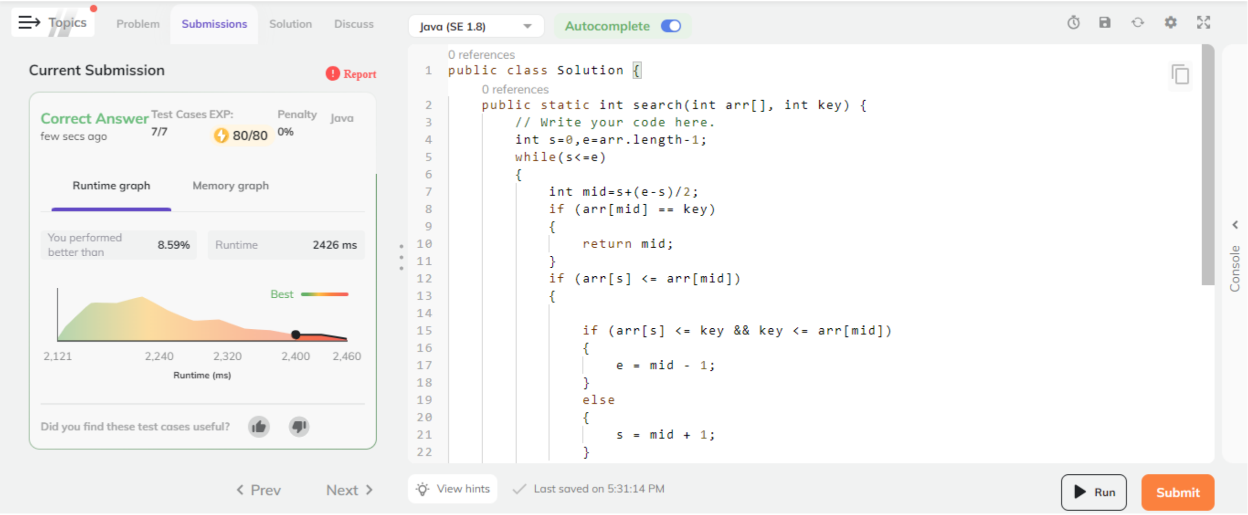
Classwork

Search In Rotated Sorted Array [Coding Ninjas]

Question Link:-
https://www.codingninjas.com/studio/problems/search-in-rotated-sorted-array_630450?leftPanelTab=0



Correct Answer
few secs ago

Test Cases: 7/7

EXP: 80/80

Penalty: 0%

Java

You performed better than 8.59%

Runtime 2426 ms

Last saved on 5:31:14 PM

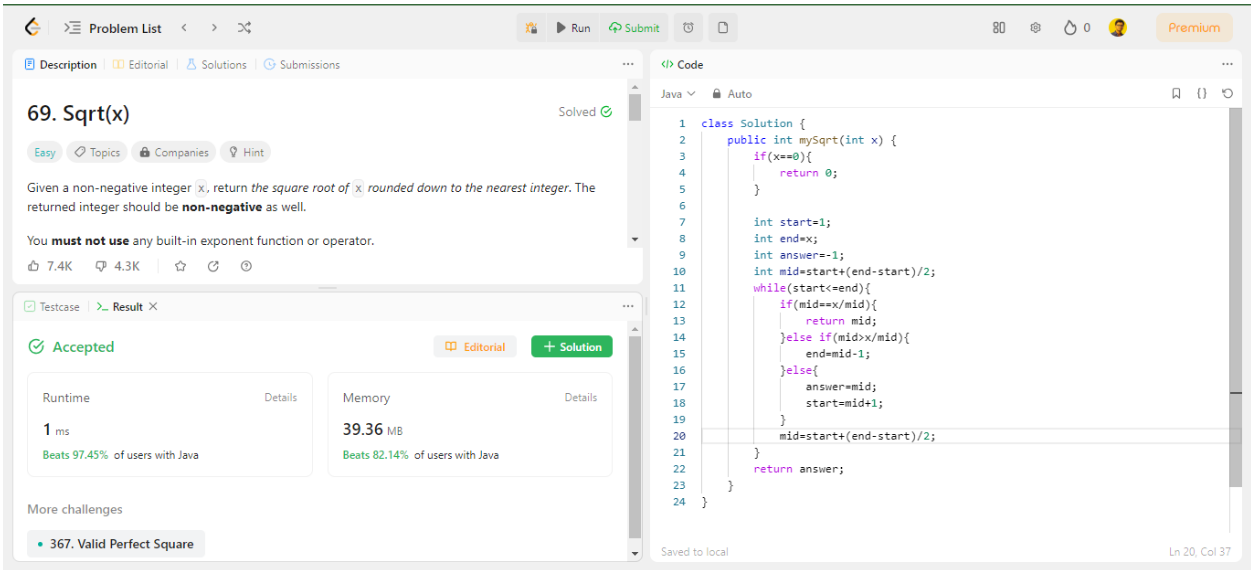
```
public class Solution {
    public static int search(int arr[], int key) {
        // Write your code here.
        int s=0,e=arr.length-1;
        while(s<=e)
        {
            int mid=s+(e-s)/2;
            if (arr[mid] == key)
            {
                return mid;
            }
            if (arr[s] <= arr[mid])
            {

                if (arr[s] <= key && key <= arr[mid])
                {
                    e = mid - 1;
                }
                else
                {
                    s = mid + 1;
                }
```

Java Code

```
public class Solution {
    public static int search(int arr[], int key) {
        // Write your code here.
        int s=0,e=arr.length-1;
        while(s<=e)
        {
            int mid=s+(e-s)/2;
            if (arr[mid] == key)
            {
                return mid;
            }
            if (arr[s] <= arr[mid])
            {

                if (arr[s] <= key && key <= arr[mid])
                {
                    e = mid - 1;
                }
                else
                {
                    s = mid + 1;
        }
      }

      else if(arr[s] >= arr[mid])
      {

        if (arr[mid] <= key && key <= arr[e])
        {
            s = mid + 1 ;
        }
        else
        {
           e = mid - 1;
        }
      }
    }
      return -1;
  }
}
```

Sqrt(x) [LeetCode]

Question link:-
https://leetcode.com/problems/sqrtx/description/



69. Sqrt(x)

Given a non-negative integer x, return *the square root of* x *rounded down to the nearest integer*. The returned integer should be **non-negative** as well.

You **must not use** any built-in exponent function or operator.

Accepted

Runtime
1 ms
Beats 97.45% of users with Java

Memory
39.36 MB
Beats 82.14% of users with Java

More challenges

- 367. Valid Perfect Square

```java
class Solution {
    public int mySqrt(int x) {
        if(x==0){
            return 0;
        }

        int start=1;
        int end=x;
        int answer=-1;
        int mid=start+(end-start)/2;
        while(start<=end){
            if(mid==x/mid){
                return mid;
            }else if(mid>x/mid){
                end=mid-1;
            }else{
                answer=mid;
                start=mid+1;
            }
            mid=start+(end-start)/2;
        }
        return answer;
    }
}
```

Java Code

```
class Solution {
    public int mySqrt(int x) {
        if(x==0){
            return 0;
        }

        int start=1;
        int end=x;
        int answer=-1;
        int mid=start+(end-start)/2;
        while(start<=end){
            if(mid==x/mid){
                return mid;
            }else if(mid>x/mid){
                end=mid-1;
            }else{
                answer=mid;
                start=mid+1;
            }
            mid=start+(end-start)/2;
        }
        return answer;
    }
}
```