

- hw-day6
 - gasStation.js
 - rotate_Sorted.js
 - water.js
- 3sum.js
- Day-6.pdf
- IsPalindrom.js
- Maximum-Subarray.js
- two_sum.js

```
1  var search = function(nums, target) {
2
3
4      } else {
5          left = mid + 1;
6      }
7  } else { // Right half is sorted
8      // Check if the target is within the sorted right half
9      if (nums[mid] < target && target <= nums[right]) {
10         left = mid + 1;
11     } else {
12         right = mid - 1;
13     }
14 }
15
16 }
17
18 }
19
20 return -1; // Target not found
21
22 };
23
24 // Example usage:
25 const nums1 = [4,5,6,7,0,1,2];
26 const target1 = 0;
27 console.log(search(nums1, target1)); // Output: 4
28
29 const nums2 = [4,5,6,7,0,1,2];
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```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

```
PS C:\Users\atulr\OneDrive\Desktop\geekster\javascript\Assigment\Day-6> node "c:\Users\atulr\OneDrive\Desktop\geekster\javascript\As
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-1
-1
PS C:\Users\atulr\OneDrive\Desktop\geekster\javascript\Assigment\Day-6>
```

hw-day6

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```
1 var maxArea = function(height) {
2   let maxArea = 0;
3   let left = 0;
4   let right = height.length - 1;
5
6   while (left < right) {
7     const h = Math.min(height[left], height[right]);
8     const w = right - left;
9     const area = h * w;
10
11     maxArea = Math.max(maxArea, area);
12
13     if (height[left] < height[right]) {
14       left++;
15     } else {
16       right--;
17     }
18   }
19
20   return maxArea;
21 };
22
23 // Example usage:
24 const height1 = [1,8,6,2,5,4,8,3,7];
25 console.log(maxArea(height1)); // Output: 49
26
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

```
PS C:\Users\atulr\OneDrive\Desktop\geekster\javascript\Assigment\Day-6> node "c:\Users\atulr\OneDrive\Desktop\geekster\javascript\Ass
49
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PS C:\Users\atulr\OneDrive\Desktop\geekster\javascript\Assigment\Day-6>
```

DAY-6

- 3sum.js
- IsPalindrom.js
- Maximum-Subarray.js
- two_sum.js

3sum.js > threeSum

```

1  const nums = [-1, 0, 1, 2, -1, -4];
2  const target = 0;
3
4  const threeSum = function(nums) {
5      nums.sort((a, b) => a - b); // Sort the array
6
7      const result = [];
8
9      for (let i = 0; i < nums.length - 2; i++) {
10         // Avoid duplicates
11         if (i === 0 || (i > 0 && nums[i] !== nums[i - 1])) {
12             let left = i + 1;
13             let right = nums.length - 1;
14             const target = -nums[i];
15             while (left < right) {
16                 const sum = nums[left] + nums[right];
17                 if (sum === target) {
18                     result.push([nums[i], nums[left], nums[right]]);
19                     while (left < right && nums[left] === nums[left + 1]) left++;
20                     while (left < right && nums[right] === nums[right - 1]) right--;
21
22                     left++;
23                     right--;
24                 } else if (sum < target) {

```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

PS C:\Users\atulr\OneDrive\Desktop\geekster\javascript\Assignment\Day-6> node "c:\Users\atulr\OneDrive\Desktop\geekster\javascript\Ass
[[-1, -1, 2], [-1, 0, 1]]
PS C:\Users\atulr\OneDrive\Desktop\geekster\javascript\Assignment\Day-6>