

## 75 Days of Code

### Day8 Problem no: 334

Given an integer array `nums`, return `true` if there exists a triple of indices  $(i, j, k)$  such that  $i < j < k$  and  $nums[i] < nums[j] < nums[k]$ . If no such indices exists, return `false`.

Example 1:

Input: `nums = [1,2,3,4,5]`

Output: `true`

Explanation: Any triplet where  $i < j < k$  is valid.

Example 2:

Input: `nums = [5,4,3,2,1]`

Output: `false`

Explanation: No triplet exists.

Solution

For this problem , to get  $num[i] < num[j] < num[k]$

- 1 . Iterate over the loop and calculate `nums[i]` and `num[j]`;
2. To calculate `num[i]` and `num[j]` , we initialize two variable at tops as `max1` and `max2`
3. If we found `max1` and `max2` , so if there will be any element greater than these 2 , will hit the last condition which return `true` and stops the loop

```

// Explanation: NO triplet exists.
function increasingTriplet(nums: number[]): boolean {
    if(nums.length<=2)return false;
    let max1 = Number.MAX_VALUE;
    let max2 = Number.MAX_VALUE

    for(let index =0;index<nums.length ;index++){
        if(nums[index]<=max1){
            max1 = nums[index]
        }else if(nums[index]<=max2){
            max2 = nums[index];
        }else{
            return true;
        }
    }
}

return false ;
};

let soln = increasingTriplet([5,4,3,2,1]);
console.log(soln)

```

PROBLEMS 8 OUTPUT DEBUG CONSOLE TERMINAL GITLENS

[Running] node "c:\Users\Shubham\Desktop\75daysOfCode\75DaysOfCode\day8.js"  
false