

5547. Arithmetic Subarrays

My Submissions (/contest/weekly-contest-212/problems/arithmetic-subarrays/submissions/)

Back to Contest (/contest/weekly-contest-212/)

A sequence of numbers is called **arithmetic** if it consists of at least two elements, and the difference between every two consecutive elements is the same. More formally, a sequence `s` is arithmetic if and only if `s[i+1] - s[i] == s[1] - s[0]` for all valid `i`.

For example, these are **arithmetic** sequences:

```
1, 3, 5, 7, 9
7, 7, 7, 7
3, -1, -5, -9
```

The following sequence is not **arithmetic**:

```
1, 1, 2, 5, 7
```

You are given an array of `n` integers, `nums`, and two arrays of `m` integers each, `l` and `r`, representing the `m` range queries, where the `ith` query is the range `[l[i], r[i]]`. All the arrays are **0-indexed**.

Return a list of boolean elements `answer`, where `answer[i]` is true if the subarray `nums[l[i]], nums[l[i]+1], ... , nums[r[i]]` can be **rearranged** to form an **arithmetic** sequence, and false otherwise.

Example 1:

**Input:** `nums = [4,6,5,9,3,7], l = [0,0,2], r = [2,3,5]`

**Output:** `[true,false,true]`

**Explanation:**  
In the 0<sup>th</sup> query, the subarray is `[4,6,5]`. This can be rearranged as `[6,5,4]`, which is an arithmetic sequence.  
In the 1<sup>st</sup> query, the subarray is `[4,6,5,9]`. This cannot be rearranged as an arithmetic sequence.  
In the 2<sup>nd</sup> query, the subarray is `[5,9,3,7]`. This can be rearranged as `[3,5,7,9]`, which is an arithmetic sequence.

Example 2:

**Input:** `nums = [-12,-9,-3,-12,-6,15,20,-25,-20,-15,-10], l = [0,1,6,4,8,7], r = [4,4,9,7,9,10]`

**Output:** `[false,true,false,false,true,true]`

Constraints:

- `n == nums.length`
- `m == l.length`
- `m == r.length`
- `2 <= n <= 500`
- `1 <= m <= 500`
- `0 <= l[i] < r[i] < n`
- `-105 <= nums[i] <= 105`

JavaScript

```
1 /**
2  * @param {number[]} nums
3  * @param {number[]} l
4  * @param {number[]} r
5  * @return {boolean[]}
6  */
7 var checkArithmeticSubarrays = function(nums, l, r) {
8
9  };
```