2470. Number of Subarrays With LCM Equal to K

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Given an integer array `nums` and an integer `k`, return *the number of **subarrays** of `nums` where the least common multiple of the subarray's elements is* `k`.

A **subarray** is a contiguous non-empty sequence of elements within an array.

The **least common multiple of an array** is the smallest positive integer that is divisible by all the array elements.

User Accepted:	6742
User Tried:	8717
Total Accepted:	7072
Total Submissions:	21933
Difficulty:	Medium

Example 1:

```
Input: nums = [3,6,2,7,1], k = 6
Output: 4
Explanation: The subarrays of nums where 6 is the least common multiple of all the subarray's el
- [3,6,2,7,1]
- [3,6,2,7,1]
- [3,6,2,7,1]
- [3,6,2,7,1]
```

Example 2:

```
Input: nums = [3], k = 2
Output: 0
Explanation: There are no subarrays of nums where 2 is the least common multiple of all the subarray's elements.
```

Constraints:

- `1 <= nums.length <= 1000`
- `1 <= nums[i], k <= 1000`

Discuss (https://leetcode.com/problems/number-of-subarrays-with-lcm-equal-to-k/discuss)

JavaScript ▼   ⟨⟩   ↻   ⚙

```javascript
1   const gcd = (a, b) => b == 0 ? a : gcd(b, a % b);
2   const lcm = (a, b) => (a / gcd(a, b)) * b;
3
4 ▾ const subarrayLCM = (a, K) => {
5       let n = a.length, res = 0;
6 ▾     for (let i = 0; i < n; i++) {
7           let l = 1;
8 ▾         for (let j = i; j < n; j++) {
9               l = lcm(l, a[j]);
10              if (l > K) break;
11              if (l == K) res++;
12          }
13      }
14      return res;
15  };
```

☐ **Custom Testcase**   (Use Example Testcases)

⏵ Run   ☁ Submit

Submission Result: Accepted (/submissions/detail/842478370/) ❓   (More Details ❯ (/submissions/detail/842478370/))

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