

# Problem 3115: Maximum Prime Difference

## Problem Information

**Difficulty:** Medium

**Acceptance Rate:** 58.07%

**Paid Only:** No

**Tags:** Array, Math, Number Theory

## Problem Description

You are given an integer array `nums`.

Return an integer that is the **maximum** distance between the **indices** of two (not necessarily different) prime numbers in `nums`__``.

**Example 1:**

**Input:** `nums = [4,2,9,5,3]`

**Output:** 3

**Explanation:** `nums[1]`, `nums[3]`, and `nums[4]` are prime. So the answer is  $|4 - 1| = 3$ .

**Example 2:**

**Input:** `nums = [4,8,2,8]`

**Output:** 0

**Explanation:** `nums[2]` is prime. Because there is just one prime number, the answer is  $|2 - 2| = 0$ .

**Constraints:**

\* `1 <= nums.length <= 3 \* 10<sup>5</sup>` \* `1 <= nums[i] <= 100` \* The input is generated such that the number of prime numbers in the `nums` is at least one.

## Code Snippets

### C++:

```
class Solution {  
public:  
    int maximumPrimeDifference(vector<int>& nums) {  
  
    }  
};
```

### Java:

```
class Solution {  
    public int maximumPrimeDifference(int[] nums) {  
  
    }  
}
```

### Python3:

```
class Solution:  
    def maximumPrimeDifference(self, nums: List[int]) -> int:
```