2523. Closest Prime Numbers in Range

Description

Given two positive integers `left` and `right`, find the two integers `num1` and `num2` such that:

- `left <= num1 < num2 <= right` .
- `num1` and `num2` are both **prime** numbers.
- `num2 - num1` is the **minimum** amongst all other pairs satisfying the above conditions.

Return *the positive integer array* `ans = [num1, num2]`. *If there are multiple pairs satisfying these conditions, return the one with the minimum* `num1` *value or* `[-1, -1]` *if such numbers do not exist.*

A number greater than `1` is called **prime** if it is only divisible by `1` and itself.

Example 1:

```
Input: left = 10, right = 19
Output: [11,13]
Explanation: The prime numbers between 10 and 19 are 11, 13, 17, and 19.
The closest gap between any pair is 2, which can be achieved by [11,13] or [17,19].
Since 11 is smaller than 17, we return the first pair.
```

Example 2:

```
Input: left = 4, right = 6
Output: [-1,-1]
Explanation: There exists only one prime number in the given range, so the conditions cannot be satisfied.
```

Constraints:

- `1 <= left <= right <= 10^6`