5915. Find the Minimum and Maximum Number of Nodes Between Critical Points

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Back to Contest (/contest/weekly-contest-265/)

User Accepted:	0
User Tried:	0
Total Accepted:	0
Total Submissions:	0
Difficulty:	Medium

A **critical point** in a linked list is defined as **either** a **local maxima** or a **local minima**.

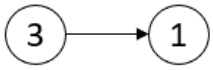
A node is a **local maxima** if the current node has a value **strictly greater** than the previous node and the next node.

A node is a **local minima** if the current node has a value **strictly smaller** than the previous node and the next node.

Note that a node can only be a local maxima/minima if there exists **both** a previous node and a next node.

Given a linked list `head`, return *an array of length 2 containing* `[minDistance, maxDistance]` *where* `minDistance` *is the* ***minimum distance*** *between* ***any two distinct*** *critical points and* `maxDistance` *is the* ***maximum distance*** *between* ***any two distinct*** *critical points. If there are* ***fewer*** *than two critical points, return* `[-1, -1]`.

Example 1:




```
Input: head = [3,1]
Output: [-1,-1]
Explanation: There are no critical points in [3,1].
```

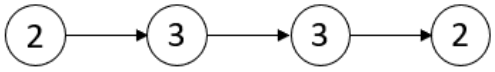
Example 2:


```
Input: head = [5,3,1,2,5,1,2]
Output: [1,3]
Explanation: There are three critical points:
- [5,3,1,2,5,1,2]: The third node is a local minima because 1 is less than 3 and 2.
- [5,3,1,2,5,1,2]: The fifth node is a local maxima because 5 is greater than 2 and 1.
- [5,3,1,2,5,1,2]: The sixth node is a local minima because 1 is less than 5 and 2.
The minimum distance is between the fifth and the sixth node. minDistance = 6 - 5 = 1.
The maximum distance is between the third and the sixth node. maxDistance = 6 - 3 = 3.
```

Example 3:


```
Input: head = [1,3,2,2,3,2,2,2,7]
Output: [3,3]
Explanation: There are two critical points:
- [1,3,2,2,3,2,2,2,7]: The second node is a local maxima because 3 is greater than 1 and 2.
- [1,3,2,2,3,2,2,2,7]: The fifth node is a local maxima because 3 is greater than 2 and 2.
Both the minimum and maximum distances are between the second and the fifth node.
Thus, minDistance and maxDistance is 5 - 2 = 3.
Note that the last node is not considered a local maxima because it does not have a next node.
```

Example 4:




```
Input: head = [2,3,3,2]
Output: [-1,-1]
Explanation: There are no critical points in [2,3,3,2].
```

Constraints:

- The number of nodes in the list is in the range `[2, 10^5]` .
- `1 <= Node.val <= 10^5`

JavaScript

```
/**
 * Definition for singly-linked list.
 * function ListNode(val, next) {
 *     this.val = (val===undefined ? 0 : val)
 *     this.next = (next===undefined ? null : next)
 * }
 */
/**
 * @param {ListNode} head
 * @return {number[]}
 */
var nodesBetweenCriticalPoints = function(head) {

};
```

Custom Testcase Use Example Testcases

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