140. In a string S of lowercase letters, these letters form consecutive groups of the same character. For example, a string like s = "abbxxxxzyy" has the groups "a", "bb", "xxxx", "z", and "yy". A group is identified by an interval [start, end], where start and end denote the start and end indices (inclusive) of the group. In the above example, "xxxx" has the interval [3,6]. A group is considered large if it has 3 or more characters. Return the intervals of every large group sorted in increasing order by start index.

Example 1:
Input: s = "abbxxxxzzy"
Output: [[3,6]]
Explanation: "xxxx" is the only large group with start index 3 and end index 6.

AIM: To return the intervals of every large group sorted in increasing order by start index

PROGRAM:

```
def largeGroupPositions(s):
    if not s:
        return []
    n = len(s)
    result = []
    start = 0
    for i in range(1, n):
        if s[i] != s[i - 1]:
            if i - start >= 3:
                result.append([start, i - 1])
            start = i
    if n - start >= 3:
        result.append([start, n - 1])

    return result
print(largeGroupPositions("abbxxxxzzy"))
print(largeGroupPositions("abc"))
print(largeGroupPositions("abcdddeeeeaabbbcd"))
```

OUTPUT:

```
[[3, 6]]
[]
[[3, 5], [6, 9], [12, 14]]
```

TIME COMPLEXITY: O(n)