5923. Minimum Number of Buckets Required to Collect Rainwater from Houses

My Submissions (/contest/biweekly-contest-66/problems/minimum-number-of-buckets-required-to-collect-rainwater-from-houses/submissions/)

Back to Contest (/contest/biweekly-contest-66/)

You are given a **0-indexed** string `street`. Each character in `street` is either `'H'` representing a house or `'.'` representing an empty space.

You can place buckets on the **empty spaces** to collect rainwater that falls from the adjacent houses. The rainwater from a house at index `i` is collected if a bucket is placed at index `i - 1` **and/or** index `i + 1`. A single bucket, if placed adjacent to two houses, can collect the rainwater from **both** houses.

Return *the **minimum** number of buckets needed so that for **every** house, there is **at least** one bucket collecting rainwater from it, or* `-1` *if it is impossible.*

User Accepted:	1477
User Tried:	2036
Total Accepted:	1497
Total Submissions:	3998
Difficulty:	Medium

Example 1:

```
Input: street = "H..H"
Output: 2
Explanation:
We can put buckets at index 1 and index 2.
"H..H" -> "HBBH" ('B' denotes where a bucket is placed).
The house at index 0 has a bucket to its right, and the house at index 3 has a bucket to its left.
Thus, for every house, there is at least one bucket collecting rainwater from it.
```

Example 2:

```
Input: street = ".H.H."
Output: 1
Explanation:
We can put a bucket at index 2.
".H.H." -> ".HBH." ('B' denotes where a bucket is placed).
The house at index 1 has a bucket to its right, and the house at index 3 has a bucket to its left.
Thus, for every house, there is at least one bucket collecting rainwater from it.
```

Example 3:

```
Input: street = ".HHH."
Output: -1
Explanation:
There is no empty space to place a bucket to collect the rainwater from the house at index 2.
Thus, it is impossible to collect the rainwater from all the houses.
```

Example 4:

```
Input: street = "H"
Output: -1
Explanation:
There is no empty space to place a bucket.
Thus, it is impossible to collect the rainwater from the house.
```

Example 5:

```
Input: street = "."
Output: 0
Explanation:
There is no house to collect water from.
Thus, 0 buckets are needed.
```

Constraints:

- `1 <= street.length <= 10^5`
- `street[i]` is either `'H'` or `'.'`.

JavaScript

```
const minimumBuckets = (s) => {
    let n = s.length, h = [];
    if (n == 1 && s[0] == 'H') return -1;
    for (let i = 0; i < n; i++) {
        if (s[i] == 'H') {
            if (i == 0) {
                if (s[i + 1] == 'H') return -1;
            } else if (i == n - 1) {
                if (s[i - 1] == 'H') return -1;
            } else {
                if (s[i - 1] == 'H' && s[i + 1] == 'H') {
                    return -1;
                }
            }
            h.push(i);
        }
    }
    let len = h.length, se = new Set(), used = new Set();
    for (let i = 0; i + 1 < len;) {
        if (used.has(h[i + 1])) continue;
        if (h[i + 1] - h[i] == 2) {
            se.add(h[i] + 1);
            used.add(h[i + 1]);
            used.add(h[i]);
            i += 2;
        } else {
            i++;
        }
    }
    // pr(h, len)
    // pr(se, used);
    let rest = len - used.size;
    return se.size + rest;
};
```

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1