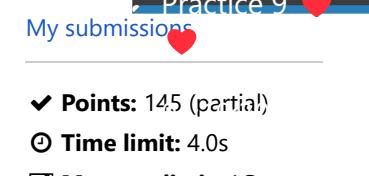# [CS 11] Prac 9k – Logging II

Problem Statement

The guards at Quiwa Hall have a new task—to keep track of the number of people inside the building at any time!

For this, the guards have required every visitor who enters the building to write their name into the log book, and they have also required every visitor who exits the building to write their name again into the log book.

However, they used the same log book, and they didn't ask them to write whether they were entering or leaving! Luckily, it should still be possible to know whether or not a person is inside the building or not, based on how many times their name appears in the log book.

Given the sequence of log entries, each containing a name, provide a sequence of integers, each of which denotes the number of people inside the building after each corresponding log entry, assuming that the building starts out empty right before the log.

Task Details

Your task is to implement a function called `people_inside`. This function has a single parameter, a `tuple` or `list` of `str` s.

The function must return a `list` of `int` s denoting the number of people inside the building after each log entry.

Restrictions

(See 9a for more restrictions)

For this problem in particular:

- Recursion is allowed.
- The source code limit is 2000.

Example Calls

Example 1 Function Call

```
people_inside((                                    Copy
    'Kevin',
    'Rich',
    'Jem',
    'Kevin',
    'Kevin',
    'Jem',
    'Kevin',
    'Jozelle',
    'Kevin',
    'Kevin',
))
```

Example 1 Return Value

```
[1, 2, 3, 2, 3, 2, 1, 2, 3, 2]        Copy
```

Constraints

- The function `people_inside` will be called at most $60{,}000$ times.
- The length of each input sequence will be at most $200{,}000$.
- The total length of all input sequences will be at most $200{,}000$.
- Each name is a nonempty string of up to 7 English letters.

Scoring

- You get 45 ❤ points if you solve all test cases where:
  - The length of each sequence is at most 50.
  - The total length of all input sequences is at most 500.
- You get 50 ❤ points if you solve all test cases where:
  - The length of each sequence is at most $4{,}000$.
  - The total length of all input sequences is at most $8{,}000$.
- You get 50 ❤ points if you solve all test cases.

❓ Clarifications   Report an issue

No clarifications have been made at this time.

Submit solution

[CS 11]
Practice 9 ❤

My submissions ❤

✔ **Points:** 145 (partial)
⏱ **Time limit:** 4.0s
▤ **Memory limit:** 1G

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❯ **Problem type**

❮ **Allowed languages**
NONE, py3