

Computer Programming 2 Lab

2023/05/10 Andy Hung



Outline

- hw7
- Prefix, Infix & Suffix
- First contribution
- ex8

hw7

- UVA 104
- Google it
- Try to understand others answers.
- When dealing with dp, write down each step.

Prefix, Infix & Suffix

$(1 + 2) * (3 + 4)$

| Type | Chinese | Expression |
|--------|---------|---------------------|
| Prefix | 前缀 | $* + 1 2 + 3 4$ |
| Infix | 中缀 | $(1 + 2) * (3 + 4)$ |
| Suffix | 后缀 | $1 2 + 3 4 + *$ |

Count 1 2 + 3 4 + * with Suffix

| Get | Stack |
|-----|-------|
| 1 | 1 |
| 2 | 1 2 |
| + | 3 |
| 3 | 3 3 |
| 4 | 3 3 4 |
| + | 3 7 |
| * | 2 1 |

■ ex: □□□□□□□

First contribution

- First contribution
- Recommended to experience flow of fork => checkout => add => commit => push => pr => merge

ex5

Given a string ``path``, which is an **absolute path** (starting with a slash ``/``) to a file or directory in a Unix-style file system, convert it to the simplified **canonical path**.

In a Unix-style file system, a period ``.`` refers to the current directory, a double period ```` refers to the directory up a level, and any multiple consecutive slashes (i.e. ``//``) are treated as a single slash ``/``. For this problem, any other format of periods such as ``.`...`` are treated as file/directory names.

ex5 - Input

An absolute path.

- $1 \leq \textit{path.length} \leq 3000$
- path consists of English letters, digits, period ``.``, slash ``/`` or ``_``.
- path is a valid absolute Unix path.

ex5 - Output

The simplified canonical path.

The canonical path should have the following format:

- The path starts with a single slash `/`.
- Any two directories are separated by a single slash `/`.
- The path does not end with a trailing `/`.
- The path only contains the directories on the path from the root directory to the target file or directory (i.e., no period `.` or double period `..`)

ojtest

- V2 website
- Bug report in issues

