

[CS 11 25.1] HOPE 1 C2 – Flip Flop

Cheatsheet is available here: <https://oj.dcs.upd.edu.ph/cs11cheatsheet/>

Problem Statement

You approach the only door you see. Beside it is a panel that displays a weird sequence of pluses (`(+)`), minuses (`(-)`), and digits (`(0)`, `(1)`, ..., `(9)`).

You distinctly recall some sage advice someone told you in the past:

"Spaces around `(+)` and `(-)` are OK, but spaces between digits of a number are not OK."

You realize that you need to *evaluate* the value of this weird sequence of characters.

If you treat the sequence of characters as a Python expression, what value do you get?

Task Details

Your task is to implement a function named `evaluate`. This function has one parameter: a string consisting of pluses, minuses, and digits.

The function must return an integer denoting the value of the expression given by the string.

Restrictions

- Comprehensions are **disallowed**.
- Your source code must have at most 850 bytes.

Examples

Example 1 Function Call

```
evaluate("3 + 4")
```

Example 1 Return Value

```
7
```

Example 2 Function Call

```
evaluate("3 - -4")
```

Example 2 Return Value

```
7
```

Example 3 Function Call

```
evaluate("3-- 4")
```

Example 3 Return Value

```
7
```

Example 4 Function Call

```
evaluate("- - - - - 3- - - - - 4")
```

Example 4 Return Value

```
-1
```

Example 5 Function Call

```
evaluate("- +- - --+ + 3+ + - - ++ - 4")
```

Example 5 Return Value

```
-7
```

Example 6 Function Call

```
evaluate("--1 +2 -3")
```

Example 6 Return Value

```
0
```

Constraints

- The function `evaluate` will be called at most 200 times.
- The input has length at most 200.
- Each character in the input is either a space, a plus (`(+)`), a minus (`(-)`), or a digit (`(0)`, `(1)`, ..., `(9)`).
- No two digits in the input are adjacent to each other.
- No two digits in the input are separated only by spaces.
- The input does not consist solely of spaces.
- The last non-space character in the input is a digit.

Scoring

- Note:** New tests may be added and all submissions may be rejudged at a later time. (All future tests will satisfy the constraints.)
- You get 25 🧡 points if you solve all test cases where:
 - There are no spaces in the input.
 - No two signs in the input are adjacent to each other.
 - There are no minus signs in the input.
 - You get 25 🧡 points if you solve all test cases where:
 - No two signs in the input are adjacent to each other.
 - There are no minus signs in the input.
 - You get 75 🧡 points if you solve all test cases where:
 - There are no minus signs in the input.
 - You get 50 🧡 points if you solve all test cases.

Clarifications

No clarifications have been made at this time.

Report an issue

Submit solution

[CS 11 25.1]

HOPE 1

✔ Points: 17½ (partial)

🕒 Time limit: 12.0s

📦 Memory limit: 2G

➤ Problem type

▼ Allowed languages

py3