[CS 11 25.1] Lab 2a – Broken Calculator 2

Problem Statement

Yuuka's calculator broke again! She won't be able to finish all of her secretarial duties at this rate...

This time, Yuuka's calculator takes in **any** number of integers. When asked for the sum of the integers, the calculator still returns 1 more than the actual sum if **an odd number of these integers are odd**. Otherwise, the calculator gives the correct sum.

Can you simulate Yuuka's calculator for her again?

Task Details

Your task is to implement a function named `broken_add`, which should have the following *signature*:

```
def broken_add(*nums):
```

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The above says that it takes in a variable number of arguments `nums`. All arguments will be integers (`int`).

The function must return an integer (`int`) denoting the calculator's output.

Restrictions

- The following symbols can now be used: `min`, `max`, `sum`, `range`, `all`, `any`.
- recursion is *disallowed*.
- comprehensions are allowed.
- at most 6 functions can be defined.
- Your source code must have at most 250 bytes.

Examples

Example 1 Function Call

```
broken_add(1, 2, 1)
```

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Example 1 Return Value

```
4
```

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Example 2 Function Call

```
broken_add(1, 2)
```

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Example 2 Return Value

```
4
```

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Constraints

- The function `broken_add` will be called at most 100 times.
- For each argument a in `nums`, $0 \le a \le 10^{20}$.
- The sum of the lengths of `nums` across all calls to `broken_add` will be $\le 10^4$.

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:
  - The arguments in `nums` are either all even or all odd.
- You get 25 ♥ points if you solve all test cases where:
  - Each argument in `nums` is either 0 or 1.
- You get 100 ♥ points if you solve all test cases where:
  - The sum of the lengths of `nums` across all calls to `broken_add` will be ≤ 100.
- You get 50 ● points if you solve all test cases.

Submit solution

My submissions

✓ **Points:** 200 (partial)

Time limit: 3.0s

Memory limit: 1G

› **Problem type**

⌄ **Allowed languages**

py3

Clarifications

Report an issue

No clarifications have been made at this time.