[CS 11 25.1] Lab 6c – Blockbuster

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

Submit solution [CS 11 25.1] Lab Exercise 6

My submissions

Points: 300 (partial)
Time limit: 9.0s
Memory limit: 1G

Problem type

Allowed languages
py3

Problem Statement

Bumhouse Productions is a film production company from a small country called Bilippines. The currency in Bilippines is the **bezo**, written as the symbol Ƀ.

Bumhouse Production have allocated a budget of between b_1 and b_2 bezos, inclusive, to fund their next great horror film.

They have received m movie proposals. The ith movie runs for r_i minutes.

There are also a insanely versatile actors who can play the lead role in any of these films. Hiring the ith actor costs h_i bezos per second.

They must select exactly one movie and exactly one actor to play the lead role in it. How many ways are there to do so such that the overall cost is within Bumhouse's allocated budget?

Task Details

Your task is to implement a function called `movie_count`. The function takes four arguments:

- the first is a `tuple` or `list` of m `int`s representing the r_is.
- the second is a `tuple` or `list` of a `int`s representing the h_is.
- the third is the `int` b_1.
- the fourth is the `int` b_2.

The function must return an `int` denoting the answer.

Restrictions

Note that some names are banned. Here are a few of them: `input`, `type`. This is not an exhaustive list. (If you accidentally use a variable name that turns out to be banned, please rename it.)

The following imports are now allowed:

- `count`, `islice`, and `chain` from `itertools`.

For this problem:

- The source code limit is 2000.

Example Calls

Example 1 Function Call

```
movie_count(
    [90, 63, 120, 70, 150],
    (3, 1, 4, 9, 6),
    5_000,
    15_000
)
```

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Example 1 Return Value

```
5
```

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Constraints

- The function `movie_count` will be called at most $60{,}000$ times.
- $0 \le m \le 250{,}000$
- $0 \le a \le 250{,}000$
- The sum of the ms will be at most $250{,}000$.
- The sum of the as will be at most $250{,}000$.
- $1 \le b_1 \le b_2 \le 10^{40}$
- $1 \le r_i, h_i \le 10^{20}$

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 120 ❤️ points if you solve all test cases where:
  - $m \le 50$
  - $a \le 50$
  - The sum of the ms is at most 500.
  - The sum of the as is at most 500.
- You get 30 ❤️ points if you solve all test cases where:
  - $m \le 3{,}000$
  - $a \le 3{,}000$
  - The sum of the ms is at most $6{,}000$.
  - The sum of the as is at most $6{,}000$.
- You get 150 🔴 points if you solve all test cases.

Clarifications

Report an issue

No clarifications have been made at this time.