# [CS 11] Prac 6d – I Love Shopping I

## Problem Statement

You are looking for new pens for your new artwork, so you decided to visit a popular pen shopping website: Pen Shoppe.

In this website, each listed pen has a *name*, a *price* (in pesos), and an average *rating* (number of stars).

Your friend has suggested a pen name that you might want to buy.

You are given the Pen Shoppe catalog of pens, as well as the pen name you want to buy. How much is it, and what is its rating?

If no pen with that name exists in the catalog, please indicate that as well.

## Task Details

Your task is to implement a function called `find_pen`. This function has two parameters. The first parameter is the pen catalog, which is a `tuple` of triples. Each triple describes a pen in the catalog consists of:

- a `str` denoting the name,
- an `int` denoting its price (in pesos), and
- an `int` denoting its rating.

The second parameter is a `str` denoting the pen name you want to buy.

The function must return a pair of `int`s denoting the price (in pesos) and the rating of the pen with the given name. If no pen with that name exists, your function must raise a `ValueError`.

If there are multiple names matching the target, return the first one in the catalog.

## Restrictions

(See 6a for more restrictions)

For this problem:

- Loops and lists are allowed.
- Up to $8$ function definitions are allowed.
- Recursion is **disallowed**. (The recursion limit has been greatly reduced.)
- Sets and dictionaries are **disallowed**.
- Generators and comprehensions are **disallowed**.
- The source code limit is $600$.

## Example Calls

### Example 1 Function Call

```
find_pen((
    ('Black Ballpen', 20, 8),
    ('Blue Ballpen', 20, 8),
    ('White Ballpen', 50, 1),
    ('Sign Pen', 100, 9),
    ('Pencil', 800, 7),
    ('Fountain Pen', 20, 2),
    ('Waifu Pen', 5000, 10),
), 'Pencil')
```

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### Example 1 Return Value

```
(800, 7)
```

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## Constraints

When your program is run:

- The function `find_pen` will be called at most $1{,}000$ times.
- The total number of pens across all catalogs will be at most $20{,}000$.
- The number of pens in each catalog will be at most $2{,}500$.
- Each pen name is a nonempty string of at most $15$ English letters or spaces.
- Each price is an integer between $1$ and $10{,}000$.
- Each rating is an integer between $0$ and $10$.

## Scoring

- You get $125$ ❤️ points if you solve all test cases where:
  - the given pen is always in the catalog.
- You get $75$ ❤️ points if you solve all test cases.

Submit solution [CS 11] Practice 6 ❤️

My submissions ❤️

**Points:** 200 (partial)
**Time limit:** 6.0s
**Memory limit:** 1G

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**Problem type**

**Allowed languages**
~~NONE~~, py3

## Clarifications

Report an issue

No clarifications have been made at this time.