CS50's Introduction to Programming with Python

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David J. Malan (https://cs.harvard.edu/malan/) malan@harvard.edu

f (https://www.facebook.com/dmalan) (https://github.com/dmalan) (https://www.instagram.com/davidjmalan/) (https://www.linkedin.com/in/malan/) (https://www.reddit.com/user/davidjmalan) (https://www.threads.net/@davidjmalan) (https://twitter.com/davidjmalan)

Nutrition Facts

The U.S. Food & Drug Adminstration (FDA) offers downloadable/printable posters (download-fish) that "show nutrition information for the 20 most frequently consumed raw fruits ... in the United States. Retail stores are welcome to download the posters, print, display and/or distribute them to consumers in close proximity to the relevant foods in the stores."

In a file called nutrition.py, implement a program that prompts consumers users to input a fruit (case-insensitively) and then outputs the number of calories in one portion of that fruit, per the FDA's poster for fruits, which is also available as text (nutrition/raw-fruits-poster-text-version-accessible-version). Capitalization aside, assume that users will input fruits exactly as written in the poster (e.g., strawberries, not strawberry). Ignore any input that isn't a fruit.

▶ Hints

Demo

\$ python nutrition.py
Item: apple
Calories: 130
\$ python nutrition.py
Item: banana
Calories: 110
\$ python nutrition.py
Item: chocolate

Recorded with asciinema

Before You Begin

Log into <u>cs50.dev</u> (https://cs50.dev/), click on your terminal window, and execute cd by itself. You should find that your terminal window's prompt resembles the below:

\$

Next execute

mkdir nutrition

to make a folder called nutrition in your codespace.

Then execute

cd nutrition

to change directories into that folder. You should now see your terminal prompt as nutrition/ \$. You can now execute

code nutrition.py

to make a file called nutrition.py where you'll write your program.

How to Test

Here's how to test your code manually:

Run your program with python nutrition.py . Type Apple and press Enter. Your program should output:

Calories: 130

Run your program with python nutrition.py. Type Avocado and press Enter. Your program should output:

Calories: 50

Run your program with python nutrition.py . Type Sweet Cherries and press Enter. Your program should output

Calories: 100

Run your program with python nutrition.py. Type Tomato and press Enter. Your program should output nothing.

Be sure to try other fruits and vary the casing of your input. Your program should behave as expected, case-insensitively.

You can execute the below to check your code using check50, a program that CS50 will use to test your code when you submit. But be sure to test it yourself as well!

check50 cs50/problems/2022/python/nutrition

Green smilies mean your program has passed a test! Red frownies will indicate your program output something unexpected. Visit the URL that check50 outputs to see the input check50 handed to your program, what output it expected, and what output your program actually gave.

How to Submit

In your terminal, execute the below to submit your work.

submit50 cs50/problems/2022/python/nutrition