Assignment 1

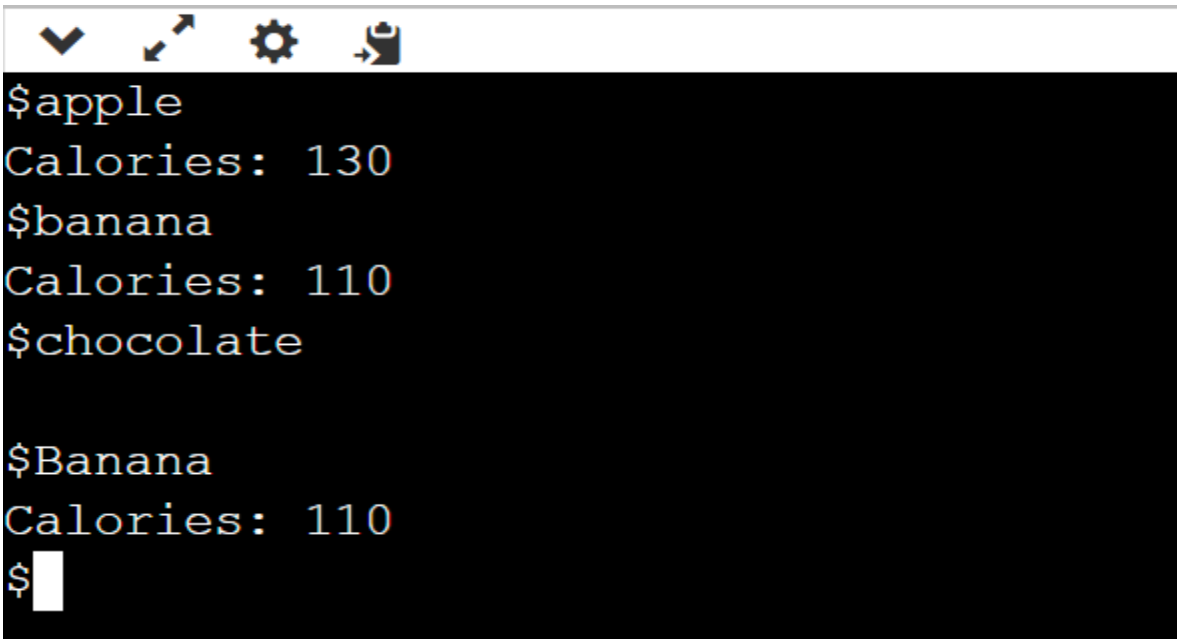
Deadline: 11:59PM on 14 Feb 2024

The U.S. Food & Drug Administration (FDA) provides nutrition information for the 20 most frequently consumed raw fruits in the United States. Your task is to implement a Python program, that allows consumers to input a fruit (case-insensitively) and outputs the number of calories in one portion of that fruit according to the FDA's poster. You can find the poster here https://www.fda.gov/media/76508/download?attachment

1. **Requirements**
   - Create a Python program that prompts users to input a fruit (case insensitive).
   - Output the number of calories in one portion of the entered fruit according to the FDA's poster.
   - Assume that users will input fruits exactly as written in the poster and ignore any input that isn't a fruit.
   - You can work with a maximum of 3 people.

2. **Instructions**

   - Use a dictionary to map each fruit to its corresponding calories.
   - Check whether the entered fruit is a key in the dictionary before processing.
   - Rather than use a conditional with 20 Boolean expressions, one for each fruit, better to use a dict to associate a fruit with its calories!
   - If k is a str and d is a dict, you can check whether k is a key in d with code.
   - Take care to output the fruit's calories, not calories from fat! e.g The calories for Apple are 130.
   - Be sure to try other fruits and vary the casing of your input. Your program should behave as expected, case-insensitively.



3. **Save the File Offline**
   - Click the “Download Code” button/icon to save the file offline.
   - Rename the downloaded main.py file as a1.py

4. **Report**
   - Write a report about how you did implemented the solution and how it is efficient.
   - Include screenshots of your code and output in the report.
   - Add your names and A numbers in the report.

5. **Submission**
   - Include your A number as comment at the top of your code i.e #A012345.
   - Submit your code as a1.py and report as a1.pdf zipped into an a1.zip file.
   - Absolutely no late submissions
   - Failure to submit on Moodle will result in 0

6. **Grading**
   - (1 point) Correctly submitting both files and including your name and correct A number.
   - (5 point) Correct solution to the problem.
   - (5 point) Submitting a report with implementation details etc.