Lab 12:
The Nations of the World...
Brought to You By Yakko Warner

Due date: today, April 19, before the end of the lab period at 11:45am.

Overview

In this lab you will read a CSV file containing information about the nations of the world and their capital cities. You will build a dictionary that uses country names as keys and capitals as values, then allow the user to look up the capital of whatever nation(s) they are interested in.

Assignment

Download the file `country-capitals.csv` from BeachBoard. Then start a new Python program, making sure the `.py` file is in the same folder location on your computer as the `.csv`.

1. Write a function `read_countries`, which behaves similarly to `read_players` in the baseball examples. Open the `country-capitals.csv` file, and read each line of that file. Each line contains **6** facts about a country: we want the fact at index 0 (the country name) and at index 1 (the name of the capital city), after splitting the line on commas. Build a dictionary where the keys of the dictionary are the names of countries (easy to remember!), and the values associated with a country name is the name of that country's capital city (hard to remember!). When you are done with the file, return the dictionary of countries.

2. Write a `main` that calls `read_countries` and saves the result in a local variable. Then write a loop that repeatedly asks the user to enter the name of a country.

3. In each iteration of the loop, you will use your dictionary to print the capital city of the user's selected country, **if the country can be found in the dictionary**, and an error message if it cannot.

4. Repeat this loop until the user enters "quit".

Example Output

User input is in *italics*.

```
Please enter a country name, or "quit": United States
The capital of United States is Washington D.C.

Please enter a country name, or "quit": Djibouti
The capital of Djibouti is Djibouti

Please enter a country name, or "quit": Westeros
Westeros is not a country

Please enter a country name, or "quit": quit
Bye!
```

Turning in the Assignment

You will demo this assignment to your Lab Leader, who will give you a set of inputs to make sure your code is correct. If your program succeeds, you will get full credit for the assignment. If something is wrong,

your Lab Leader will require you to fix the error and then demo the program again. **You will not receive credit for the assignment unless you demo it to the Lab Leader, AND the Lab Leader tells you that you are finished.**