

Lab 9:

The Miracurl On Ice

Due date: today, March 20, before the end of the lab period at 11:45am.

Overview

In this lab you will implement a program that allows the user to type in the name of a country, and outputs what place that country's men's curling team finished at the 2018 Winter Olympics.

Assignment

Locate the "Final standings" table of the 2018 Winter Olympics men's curling tournament page on Wikipedia:

https://en.wikipedia.org/wiki/Curling_at_the_2018_Winter_Olympics_%E2%80%93_Men%27s_tournament

Then create a single function `main()` and implement the following program:

1. Create a list named `placings` in your main. Your list must contain 10 country names (as strings), in the order they are listed in the Final standings table from the previous step. ("United States" being first in the list, and "Denmark" being last.)
2. Ask the user to input a country name. You do not need to validate their input.
3. **Without** using `.index`, `.find`, or any other function on lists,¹ you must determine the index at which the given country occurs in `placings`. You can use square brackets for indexing, `==` for comparison, and the `len` function to control a loop, but nothing else.
4. If you locate the given country in `placings`, you must print out what place they finished at the 2018 Winter Olympics men's curling tournament. **The user must exactly match the country name from the Wikipedia page**; you do not need to support partial matches.
 - (a) If the given country placed 1, 2, or 3, then you must **also** print out the medal that they earned: "Gold" for place 1, "Silver" for place 2, and "Bronze" for place 3.
5. If you do not locate the given country in `placings`, you must print "*[country name]* did not compete."
6. You should not have any country names in your code, other than when declaring the list `placings`. Your code should work fine if I rearrange the countries in the list, and would then give the **new** placing for the rearranged countries.
7. Women's curling is just as awesome as men's. You can use the placings for the 2018 women's tournament instead of the men's if you like! (There is a link on the Wikipedia page on the right hand side, below the summary box.)
8. Loop the entire program, *except* for creating the `placings` list, until the user enters "quit" for the country.

Make sure your code is commented.

Example Output

User input is in *italics*.

```
Please enter a country, or "quit": South Korea
```

¹I know Python can do this for you. I know you know this. Performing this type of logic by hand is an important skill that extends far beyond this simple application, so I will make you do it yourself instead of relying on the language.

South Korea placed 7

Please enter a country, or “quit”: *United States*
United States placed 1 (Gold medal)

Please enter a country, or “quit”: *Russia*
Russia did not compete

Please enter a country, 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.**