

Harrisburg University of Science & Technology

CISC 504 Principles of Programming Languages

Assignment 7.1: Becoming Pythonic Part 1

Instructions:

- Use as many code cells as you need to implement the tasks in below.
- Submit a Jupyter Notebook (iPython) doc including a 5 minutes walk-through recording (a YouTube recordings is highly recommended.)
- **DO NOT JUST SUBMIT THE NOTEBOOK**

(1) Building a Chess Tournament

You are going to use list comprehension to create fixtures for the tournament. The fixtures should read: "player_1 vs. player_2" where *player_x* should be replaced with the player's name. You are going to create a list of these fixtures so everyone plays each person twice, once in the form "player_1 vs. player_2" and "player_2 vs. player_1". You do not want a fixture of players playing against themselves.

The steps are as follows:

1. Create a list comprehension that uses this list of names twice to create tournament fixtures in the correct format.
2. Add a filter to the comprehension so that no player is pitted against themselves.
3. Print the list of tournament fixtures.

The list for the names has been provided below.

```
In [2]: names = ["Magnus Carlsen", "Fabiano Caruana", "Yifan Hou", "Wenjun Ju"]
```

(2) Building a Scorecard Using Dictionary Comprehensions and Multiple Lists

For this assignment, you will be building a scoreboard for exam scores in a college class. We want to use dictionary comprehension to create a dictionary that represents the scores for each person. The people and scores are as follows:

Person	Score
Vivian	70
Rachel	82
Tom	80
Adrian	79

Using dictionary, create a dictionary that represents the scores for each person and print out the result.

In []: