

Piscine 101
Python 04

Summary: This document is the subject for the PYTHON module 04 of the Piscine $101\ @\ 42 Tokyo.$

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Chapter I

Instructions

- Only this page will serve as reference; do not trust rumors.
- Watch out! This document could potentially change up to an hour before submission.
- These exercises are carefully laid out by order of difficulty from easiest to hardest. We will not take into account a successfully completed harder exercise if an easier one is not perfectly functional.
- Make sure you have the appropriate permissions on your files and directories.
- You have to follow the submission procedures for every exercise.
- Your exercises will be checked and graded by your fellow classmates.
- On top of that, your exercises will be checked and graded by a program called Moulinette.
- Moulinette is very meticulous and strict in its evaluation of your work. It is entirely automated and there is no way to negotiate with it. So if you want to avoid bad surprises, be as thorough as possible.
- Exercises in Shell must be executable with /bin/sh.
- You <u>cannot</u> leave <u>any</u> additional file in your directory than those specified in the subject.
- Got a question? Ask your peer on the right. Otherwise, try your peer on the left.
- Your reference guide is called Google / man / the Internet /
- Examine the examples thoroughly. They could very well call for details that are not explicitly mentioned in the subject...
- If no other explicit information is displayed, you must assume the following versions of languages: Python python3.8.2.
- No code in the global scope(only import). We want functions!
- you're free to define as many function as you like and name them as you like also.

Piscine 101 Python 04

• Each turned-in file must end with a function call in a condition identical to:

```
if __name__ == '__main__':
    your_function( whatever, parameter, is, required )
```

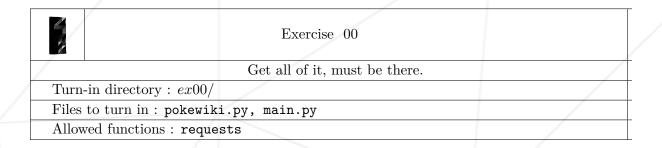
- You can set an error management in this condition.
- No import will be authorized, except the ones explicitly mentioned in the 'Autorized functions' in each exercise's description.
- You won't have to manage the exceptions raised by the open function.

Chapter II Foreword

Them - You are the semicolon to my statement; You - But I code in python.

Chapter III

Exercise 00: where is abilities?



You want to get Pokemon's information somehow.

Create the PokeWiki class containing the following functionalities:

- A method that take an entire page of a specified pokemon by name from https://pokemon.fandom
- A method that will return its species of a spacified pokemon by name.
- A method that will return the names of its abilities of a spacified pokemon by name.

For example,

```
name : bulbasaur
species : Seed Pokemon
abilities :["Overgrow", "Chlorophyll"]
```

Turn in your main.py file to test this exercise. Your main.py will be reviewed at the time of your defense.

Chapter IV

Exercise 01: easier!

	Exercise 01	
/	it's more beautiful.	
Turn-in directory:	/	
Files to turn in : pokewiki.py, main.py		
Allowed functions: requests, BeautifulSoup		

It is the same thing, but use BeautifulSoup.

Re-create the PokeWiki class containing the following functionalities:

- A method that take an entire page of a specified pokemon by name from https://pokemon.fandom
- A method that will return its species of a spacified pokemon by name.
- A method that will return the names of its abilities of a spacified pokemon by name.

Turn in your main.py file to test this exercise. Your main.py will be reviewed at the time of your defense.

Chapter V

Exercise 02: even easier!

Exercise 02	
it's api.	
Turn-in directory : $ex02/$	
Files to turn in : pokewiki.py, main.py	
Allowed functions: requests, pokeapi	

It is the same thing, but use pokeapi.

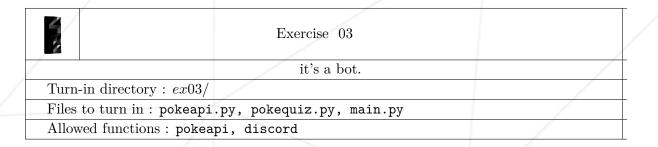
Re-create the PokeWiki class containing the following functionalities:

- A method that take an entire page of a specified pokemon by name from https://pokemon.fandom
- A method that will return its species of a spacified pokemon by name.
- A method that will return the names of its abilities of a spacified pokemon by name.
- A method that will return a random name pokemon.

Turn in your main.py file to test this exercise. Your main.py will be reviewed at the time of your defense.

Chapter VI

Exercise 03: pokequiz



Create a discord server and a bot that tests people's pokemon knowledge. Your bot must:

- give a player a quiz when member send a message !pokemontest, showing the image of a pokemon.
- give some hints every time user fail to answer the correct pokemon's name. The hints can be its abilities, initials, or species.
- ullet give the correct pokemon's name after the member failed to answer its name.

Be creative.

Chapter VII

Exercise 04: pokedex

	Exercise 04		
/	!pokedex	/	
Turn-in directory : $ex04/$			
Files to turn in : pokeapi.py, pokequiz.py, main.py			
Allowed functions: whate	ver you need		

Re-create a discord bot with following functionalities.

- $\bullet\,$ all the functionalities from the previous exercise.
- save at least 100 different player's progress using spreadsheet and its api.
- when a member send a message !pokedex, show the list of pokemons of the member answered correctly for the quiz.

Chapter VIII

Exercise 05: bonus

	Exercise 05	
/	!pokegame	
Turn-in directory : $ex05/$		
Files to turn in : pokeapi.py, pokequiz.py, main.py		
Allowed functions: whatever you need		

Add following functionalities or your original idea to the discord bot from the last exercise in order to make it into a little pokemon game.

- \bullet add some images and messages before a quiz to make a little bit of story.
- add a concept of items like pokemon ball.
- re create a quiz so that it resembles to a battle.

Be creative.