

Pokémon Battle Version 3: Reading Pokémon from a file

In this version, you will read Pokémon from a file and randomly select two Pokémon to battle.

Here is the file with the Pokémon data: [all_pokemon.txt](#) (there are 801 Pokémon in the file)

What to do

Keep the class that you implemented in Version 2 as is. No need to make any changes to the class or its methods.

1. You will add the `read_pokemon_from_file` helper function. This function will **not** be a method of the `Pokemon` class. It is a function that will be used by the main function. We call such functions **helpers**.

You **must** use the following template:

```
def read_pokemon_from_file(filename: str) -> list[Pokemon]:
    """
    Read a list of Pokemon from a file.
    """
    # TODO: Implement this function.
```

Your main function in this version will do the following:

1. Read the list of Pokémon from the file.
2. Randomly select two **different** Pokémon from the list.
3. Print the welcome message

Ensure that a Pokémon does not battle itself.

Hints

- You might be wondering what does `list[Pokemon]` mean in the following line:

```
def read_pokemon_from_file(filename: str) -> list[Pokemon]:
```

It is a list of `Pokemon` objects.

- When reading from the file [all_pokemon.txt](#), you should skip the first line.
- Some Pokémon names include “strange” characters (for example, **Nidoran**♀ or **Nidoran**♂). We call it Unicode. To properly read such characters, use the encoding argument in your open statement:
`open(filename, "r", encoding="utf-8")`

Program name

Save your program as `pokemon3.py`.

Demo

<https://asciinema.org/a/BpDQoPEO6sxF9kilgBMAaS9hg>

Testing

To make sure your program works correctly, you should test it.

Run your program with `python pokemon3.py`. Your program selects two Pokémon randomly, so each time it will print a different welcome message. Run your program several times and check that:

1. The welcome message is different each time.
2. The format of the welcome message is correct.

Examples:

```
Welcome, Bulbasaur (health: 45/45) and Spritzee (health: 78/78)!
```

```
Welcome, Nidorina (health: 70/70) and Primeape (health: 65/65)!
```

```
Welcome, Aerodactyl (health: 80/80) and Mismagius (health: 60/60)!
```

```
Welcome, Oshawott (health: 55/55) and Skitty (health: 50/50)!
```

Submitting

Submit `pokemon3.py` via eClass.

You may submit either all versions you complete, or only the final version.

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