

## Part 1 - Instructions:

In the file `part1.py` do the following:

### Exercise 1:

- ☐ Create variables `has_homework` and `has_free_time` with values `True` and `False`, respectively.
- ☐ Determine if you can play video games based on whether you have no homework and have free time. Store the result in a variable and print it.

### Exercise 2:

- ☐ Create a list named `my_pets` with at least four different types of pets (as strings).
- ☐ Add two more pets to the list at once.
- ☐ Remove the first pet from the list.
- ☐ Swap the second and last pets in the list.
- ☐ Create a new list `my_favorite_pets` by slicing the middle two pets from `my_pets`.
- ☐ Print both lists.

### Exercise 3:

Given the string `phrase = "Python programming is fun!"`, perform the following:

- ☐ Count how many times the letter `"i"` appears.
- ☐ Replace `"Python"` with `"Computer"`.
- ☐ Slice the substring `"programming is fun"` and store it in a new variable.
- ☐ Print all results.

### Exercise 4:

- ☐ Define a tuple `my_numbers` with six different numbers.
- ☐ Print the first and last numbers.
- ☐ Attempt to change the second number in the tuple to a different value (note what happens, then remove this portion from the code).

### Exercise 5:

- ☐ Create a dictionary `student_info` containing keys for `name`, `grade_level`, and `favorite_subject`.
- ☐ Add a new key `hobbies` with a list of at least three hobbies as its value.
- ☐ Change the `favorite_subject` to something else.
- ☐ Print the dictionary before and after the modifications.

### Exercise 6:

Given the variables `day = "Saturday"` and `weather = "Sunny"`,

- ☐ Write a conditional that prints `"Go for a hike!"` if it's Saturday or Sunday and the weather is Sunny.
- ☐ Otherwise, print `"Stay home and code!"`.