CODING EXERCISES

FOR LOOPS

Remember: You use for loops when you know how many times you want to repeat the code.
Example:

```
myList = [1,2,3,4,5,6]
for i in myList:
        print(i)
```

This code would loop through the list and display each element.

Exercise 1: Create a list with 10 names. Now create a program that displays each name and asks the user to decide if the person should end up on the guest list or not. At the end, display the final guest list.

Exercise 2: Each string can actually be seen as a list (with each character as a list element). Ask the user to enter a word. Create a program that removes all vowels (a,e,i,o,u) from the word and display it.

DICTIONARIES

Remember: Dictionaries are used to store data values in key:value pairs.
Here is a sample dictionary that holds book data:

```
myDictionary = {
        "title": “Moby-Dick",
        "author": "Herman Melville",
}
```

You can change a dictionary item like this: myDictionary[“title”] = “The Whale”
You can add a new item to the dictionary: myDictionary[“type”] = “Hardcover”
You can remove an item like this: myDictionary.pop(“author”)
A dictionary can hold values of different data types (strings, floats, etc.).

Exercise 3: Create a dictionary that stores personal data of a made up person. Choose 5 categories that you want to store in the dictionary (include date of birth as one of them). Fill the dictionary with made up data.
Create a program that asks users which data they want to see, then display the requested data.

Exercise 4: Modify the program you wrote in Exercise 3: Add an option that lets the user check if the person in the dictionary is 18 or older.

Exercise 5: Create a dictionary that holds key-value pairs of the numbers from 1 to 12 in English as keys and the translation into another language of your choice. Now create a test that asks the user for the translation of each number and count how many translations the user got right.

Modulus

Remember: Modulus gives you the remainder of a whole number division. For instance: myResult = 5%2
This example would set myResult to 1 (because you can divide 4 by 2 and the remainder that can’t be divided would be 1).

Exercise 6: Write a program that lets the user enter an integer and then tells the user if the number id odd or even.

Exercise 7: Write a program that take an array of 15 names and displays them in groups of 3, meaning that you output a line (use ———————————————) after every third name.