

# Python programming exercises

## Part 1

### 01. Hello World

Write your first Python program which will print "Hello World" on the console.

### 02. Hello World with a variable

#### a. Simple variable

Declare a variable **name** and assign it a value of your name. modify the script from exercise 01 to display "Hello <your name>" instead of "Hello World".

##### Example

If your name is Jan then the script should display "Hello Jan". Name should be declared as a variable value and not hardcoded in the string to display.

#### b. Keyboard input

Modify the script from the exercise 02a to let the user enter their name with a keyboard.

You should use Python built-in function **input()** to get the value from keyboard.

```
name = input('Enter your name:')
```

will display the text 'Enter your name:' and wait for the user to input data from keyboard. After hitting Enter the value will be assigned to the **name** variable.

### 03. Simple computations

Write a script in which you declare two variables.

a - length of the triangle base

h - height of the triangle

The script should display triangle field computed with usage of the aforementioned variables.

### 04. Lists

Create a script that performs operations listed below. After each operation it should print the current state of the **flowers** variable on the screen.

1. Create a list named **flowers** with the following entries: 'tulip', 'daisy', 'violet'.
2. Append entry 'rose' to the list.

3. Extend the list with the entries from the following list ['cactus', 'cornflower'].
4. Print the last entry of the list.
5. Print the second to last entry of the list.
6. Print all list entries between 'daisy' and 'cactus'.
7. Remove the last entry from the list and assign it to the variable last\_entry.
8. Print the last\_entry variable on the screen.
9. Remove 'daisy' from the list.

## 05. Dictionaries

Create a script that performs operations listed below. After each operation it should print the current state of the **car\_data** variable on the screen.

1. Create a dictionary called car\_data that contains keys 'make' and 'production\_year'. Choose your own values for the keys.
2. Add a new entry to the dictionary car\_data with a key 'owner'. Put your name as a value.
3. Check if the key 'mileage' exists in the dictionary and print appropriate value (True or False).
4. Check if the key 'owner' exists in the dictionary and print appropriate value (True or False).
5. Delete the entry 'owner' from the dictionary.