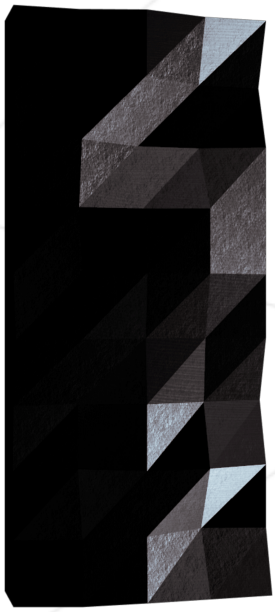

Discovery Piscine

Module1 - Python

Summary: In this Module1 you will manipulate the variables.

Version: 2.2

Contents

Chapter I

A word about this Discovery Pool

Welcome !
You will begin a Module of this Discovery Piscine of computer programming. Our goal is to introduce you to the code behind the software you use daily and immerse you in peer learning, the educational model of 42.

Programming is about logic, not mathematics. It gives you basic building blocks that you can assemble in countless ways. There is no single "correct" solution to a problem—your solution will be unique, just as each of your peers' solutions will be.

Fast or slow, elegant or messy, as long as it works, that's what matters! These building blocks will form a sequence of instructions (for calculations, displays, etc.) that the computer will execute in the order you design.

Instead of providing you with a course where each problem has only one solution, we place you in a peer-learning environment. You'll search for elements that could help you tackle your challenge, refine them through testing and experimentation, and ultimately create your own program. Discuss with others, share your perspectives, come up with new ideas together, and test everything yourself to ensure it works.

Peer evaluation is a key opportunity to discover alternative approaches and spot potential issues in your program that you may have missed (consider how frustrating a program crash can be). Each reviewer will approach your work differently—like clients with varying expectations—giving you fresh perspectives. You may even form connections for future collaborations.

By the end of this Piscine, your journey will be unique. You will have tackled different challenges, validated different projects, and chosen different paths than others—and that's perfectly fine! This is both a collective and individual experience, and everyone will gain something from it.

Good luck to all; we hope you enjoy this journey of discovery.

Chapter II

Introduction

What this Module will show you:

- You will learn to manipulate variables.

Chapter III

General instructions

Unless otherwise specified, the following rules apply every day of this Piscine.

- This document is the only trusted source. Do not rely on rumors.
- This document may be updated up to one hour before the submission deadline.
- Assignments must be completed in the specified order. Later assignments will not be evaluated unless all previous ones are completed correctly.
- Pay close attention to the access rights of your files and folders.
- Your assignments will be evaluated by your fellow Piscine peers.
- All shell assignments must run using `/bin/bash`.
- You must not leave any file in your submission workspace other than those explicitly requested by the assignments.
- Have a question? Ask your neighbor on your left. If not, try your neighbor on your right.
- Every technical answer you need can be found in the `man` pages or online.
- Remember to use the Piscine forum of your intranet and Slack!
- Read the examples thoroughly, as they may reveal requirements that aren't immediately obvious in the assignment description.
- By Thor, by Odin! Use your brain!!!

Chapter IV

Exercise 00 : Displaying a name

	Exercise 00
Displaying a name	
Turn-in directory: $ex00/$	
Files to turn in: `name.py`	
Allowed functions: `All`	

- Create a script called `name.py`.
- Define a variable named `first_name` and initialize it with your first name.
- Define a variable named `last_name` and initialize it with your last name.
- Display both variables in the output, followed by a newline.

```
?> python3 name.py | cat -e
Arthur Dent$
?>
```

Chapter V

Exercise 01 : Displaying a name improved

	Exercise 01
Displaying a name, improved	
Turn-in directory: *ex*01/	
Files to turn in: `name.py`	
Allowed functions: `All`	

- Modify your script `name.py`. (Remember to copy it to the correct submission directory first!)
- Update your script to concatenate your first name and last name, assigning the result to a new variable called `whole_name`.
- Display the `whole_name` variable, followed by a new line.

```
?> python3 name.py | cat -e
Arthur Dent$
?>
```

`Refer to the man page for cp.`

`Look up how to concatenate strings in Python.`

Chapter VI

Exercise 02: Displaying your age in 42 years

	Exercise 02
Displaying your age in 42 years	
Turn-in directory: *ex*02/	
Files to turn in: `age.py`	
Allowed functions: `All`	

- Create a script called `age.py`.
- In your script, add your age and 42, and assign the result to a new variable called `my_age`.
- Display the `my_age` variable, followed by a new line.

```
?> python3 age.py | cat -e
67$
?>
```

Chapter VII

Exercise 03: What's your name

	Exercise 03
What's your name?	
Turn-in directory: $ex03/$	
Files to turn in: `whatsyourname.py`	
Allowed functions: `All`	

- Create a script called`whatsyourname.py`.
- This script should prompt the user to enter their first name, then their last name, and finally display both.

```
?> python3 whatsyourname.py
Hey, what's your first name? : Arthur
And your last name? : Dent
Well, pleased to meet you, Arthur Dent.
?>
```

Chapter VIII

Submission and peer-evaluation

- You must have `discovery_piscine` folder at the root of your home directory.
- Inside the `discovery_piscine` folder, you must have a folder named `module1`.
- Inside the `module1` folder, you must have a folder for each exercise.
- Exercise 00 must be in the `ex00` folder, Exercise 01 in the `ex01` folder, etc.
- Each exercise folder must contain the files requested in the assignment.

`Please note, during your defense anything that is not present in the folder for the day will not be checked.`