



# Discovery Piscine

## Cell 0-3

*Summary: Create a command to count and display the total number of files and directories in the current directory.*

*Version: 2.1*

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# Chapter I

## A Word About This Discovery Piscine

### Welcome!

You are about to embark on the first phase of this discovery piscine in computer programming. Our goal is to introduce you to the code that powers the software you use daily, while also experiencing peer-learning, an educational model central to 42.

### Programming: An Art of Logic

Programming is about logic, not mathematics. It provides you with elementary building blocks that you can assemble in any way you choose. There is never *one* solution to a problem; there is *your* solution, and there are the solutions of your peers. Whether slow or fast, elegant or simple, if it accomplishes the task, that's what matters! This assembly of blocks will form a series of instructions (calculations, displays, etc.) that the computer will execute in the order you specify.

### Peer-Learning: A Dynamic Approach

Instead of providing a course with a single solution for each problem—which may become outdated in a few years—we have opted for a peer-learning environment. You will search for elements that could be useful for your challenge, test and manipulate them to find the interesting ones, and create your own program. Engage in discussions with others, exchange viewpoints, brainstorm new ideas together, and ultimately test them yourself to ensure they work.

### Peer-Evaluation: A Key Moment

Peer-evaluation is a crucial opportunity to discover different approaches and special cases that you might not have considered, which could challenge your program. Just as different clients notice different things, each reviewer will bring a unique perspective. You might even make new acquaintances for future collaborations.

## **A Unique Journey**

By the end of this piscine, you will have undertaken different challenges than your peers. You will have validated different activities and chosen different paths. This is perfectly normal! The experience is both collective and personal, and everyone will benefit from what they learn during this time.

## **Good Luck!**

We wish you the best of luck and hope you enjoy this discovery journey.

# Chapter II

## Introduction

What this cell will show you:

- Discover the terminal and the command line.
- First commands to navigate, modify and create in the filesystem.
- First programs to automate some tasks in your terminal.

# Chapter III


## General instructions

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

- This document is the only reliable source. Do not trust any rumors.
- This document may be updated up to one hour before the submission deadline.
- The assignments in this document must be completed in the given order. Later assignments will not be evaluated unless all previous ones are perfectly completed.
- Pay attention to the access rights of your files and folders.
- Your assignments will be evaluated by your Piscine peers.
- All shell assignments must run using `/bin/bash`.
- You must not include any files in your submission other than those explicitly requested by the assignments.
- Have a question? Ask your neighbor to the left. Otherwise, try your neighbor to the right.
- Every technical answer you might need is available in the `man` pages or on the Internet.
- You must read the examples thoroughly. They may reveal requirements that are not obvious in the assignment's description.
- By Thor and Odin! Use your brain!!!!

# Chapter IV

## Exercise 03: count\_files

	Exercise03
	count_files.sh
	Directory: <i>ex03/</i>
	Files to Submit: <b>count_files.sh</b>
	Authorized: <b>None</b>

- Write a command line that counts and displays the number of regular files and directories in the current directory.
- Example of output :

```
$>./count_files.sh | cat -e
42$
$>
```

# Chapter V

## Submission and peer-review

- In the `discovery_piscine` folder at the root of your home, create a new `cell00` folder and navigate to it.
- From now on, all exercises should be in the correct folder rendering. Exercise 00 in the `ex00` folder, Exercise 01 in the `ex01` folder, etc ... you get the logic.



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