

# Cybersecurity Discovery Piscine Shell 01

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 $Summary: \ \ In \ this \ project, \ you \ will \ learn \ the \ fundamentals \ of \ using \ the \ shell.$ 

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#### Chapter I

## About this Cybersecurity Discovery Piscine

#### Welcome!

Welcome to this Discovery Piscine in cybersecurity, a challenge where you will dive into the basics of offensive cybersecurity while experiencing the unique educational model of 42. Here, you won't find traditional classes or a single correct solution; learning is collaborative, hands-on, and focused on you.

We invite you to explore the code that powers the software you use every day, while developing skills that go beyond the technical: logical thinking, problem-solving, and self-directed learning. Programming isn't about memorizing rules; it's about creatively assembling blocks to solve problems in your own unique way.

During this experience, you'll tackle key topics in cybersecurity:

- Terminal navigation: Learn to operate and navigate a system using basic commands.
- OSINT (Open Source Intelligence): Discover how to gather public information to identify potential threats.
- Web security: Understand common vulnerabilities in websites and how they are exploited.
- Cryptography: Familiarize yourself with the fundamentals of data and communication protection.

Peer learning and evaluation will play a central role in your journey. You'll exchange ideas, discuss solutions, and gain new perspectives by collaborating with your peers. This will not only enrich your learning experience but also help you build connections and develop critical skills for tackling future challenges.

Remember, this experience is as unique as you are: each participant will follow their own path, validate different projects, and face unique challenges. What truly matters is what you learn, from both your successes and your mistakes.

Good luck! We hope you enjoy this journey into the world of cybersecurity and collaborative learning.

#### Chapter II

#### Introduction

You've probably seen in many "hacker" movies characters typing frantically on a black screen, pounding the keyboard, and saying "I'm in." While this isn't exactly how things work in real life, mastering the command line is an essential skill for navigating a system quickly and understanding how it operates under the hood. Additionally, learning to use the terminal will give you a solid foundation for solving problems, automating tasks, and tackling technical challenges, like the ones you'll encounter in the upcoming exercises.

What you will learn in this first project:

- Introduction to the terminal and the command line.
- Basic commands to navigate, modify, and create files in the system.
- Simple programs to automate tasks in your terminal.

#### Chapter III

#### General instructions

Unless explicitely specified, the following rules will apply on every cell of this Discovery Piscine.

- This subject is the one and only trustable source. Don't trust any rumor.
- The assignments in a subject must be done in the given order. Later assignments won't be rated unless all the previous ones are perfectly executed.
- Be careful about 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 read the examples thoroughly. They can reveal requirements that are not obvious in the assignment's description.
- You have a question? Ask your neighbor on the left. Otherwise, try your luck with your neighbor on the right.
- Every technical answer you might need is available in the man or on the Internet.
- Remember to read the documentation and to use Slack!
- By Thor, by Odin! Use your brain!!!

#### Chapter IV

#### Exercice 01

	Exercise 00	
/	Running a script	
Turn-in directory : $ex00/$		/
Files to turn in : message.sh		
Allowed functions : None		

You are supposed to be doing this excercise because you already finished and validated the previous one. Therefore, you should have already a folder  $\tt ex00$  which contains the file  $\tt message.sh$ . Your next steps should be:

- Navigate into the ex00 folder.
- Change permissions of file message.sh to allow it to be executed.
- Execute file message.sh.
- Investigate how to pass an argument to file message.sh when it is executed so you can modify its behavior.



You have to do this exercise using chmod and  $\mbox{bin/bash}$ ; otherwise it is useless :)

#### Chapter V

#### Submission and peer-evaluation

- The file message.sh is located at your ex00 folder.
- You should know how to execute and pass a parameter so it behaves as desired.



Please note that during the evaluation, what we want to verify is that you have understood the excercise. You should be able to explain it and justify the decisions you made.