



C Piscine

C 03

*Summary: This document is the subject for the C 03 module of the C Piscine @ 42.*

*Version: 4.1*

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# Chapter I

## Instructions

- Only this page serves as your reference, do not trust rumors.
- Watch out! This document may change before submission.
- Ensure you have the appropriate permissions on your files and directories.
- You must follow the **submission procedures** for all your exercises.
- Your exercises will be checked and graded by your fellow classmates.
- Additionally, your exercises will be evaluated by a program called **Moulinette**.
- **Moulinette** is meticulous and strict in its assessment. It is fully automated, and there is no way to negotiate with it. To avoid unpleasant surprises, be as thorough as possible.
- **Moulinette** is not open-minded. If your code does not adhere to the Norm, it won't attempt to understand it. **Moulinette** relies on a program called **norminette** to check if your files comply with the Norm. TL;DR: Submitting work that doesn't pass **norminette**'s check makes no sense.
- These exercises are arranged in order of difficulty, from easiest to hardest. We **will not** consider a successfully completed harder exercise if an easier one is not fully functional.
- Using a forbidden function is considered cheating. Cheaters receive a grade of **-42**, which is non-negotiable.
- You only need to submit a **main()** function if we specifically ask for a **program**
- **Moulinette** compiles with the following flags: **-Wall -Wextra -Werror**, using **cc**.
- If your program does not compile, you will receive a grade of **0**.
- You **cannot** leave **any** additional file in your directory beyond those specified in the assignment.
- Have a question? Ask the peer on your right. If not, try the peer on your left.

- Your reference guide is called **Google / man / the Internet / ...**
- Check the "C Piscine" section of the forum on the intranet or the Piscine on Slack.
- Carefully examine the examples. They may contain crucial details that are not explicitly stated in the assignment...
- By Odin, by Thor! Use your brain!!!



Norminette will be launched with the `-R CheckForbiddenSourceHeader` flag. Moulinette will use it too.

# Chapter II

## Foreword

The earliest known mention of the game Rock-Paper-Scissors (RPS) appears in the book *Wuzazu*, written by the Chinese Ming-dynasty author Xie Zhaozhi. He noted that the game dates back to the Chinese Han dynasty (206 BC – 220 AD). In *Wuzazu*, the game was called *shoushiling*.

Li Rihua's book *Note of Liuyanzhai* also references this game, calling it *shoushiling*, *huozhitou*, or *huoquan*.

Throughout Japanese history, there are frequent mentions of *sansukumi-ken*, meaning “ken” (fist) games with a three-way *sukumi* (deadlock). In these games, A defeats B, B defeats C, and C defeats A. The games originated in China before being introduced to Japan, where they became widely popular.


By the early 20th century, Rock-Paper-Scissors had spread beyond Asia, largely due to increased Japanese interactions with the West. Its English name is derived from a translation of the three Japanese hand gestures representing rock, paper, and scissors. Elsewhere in Asia, the open-palm gesture typically represents “cloth” rather than “paper”. The depiction of scissors also follows the Japanese style.

In 1927, *La Vie au Patronage*, a French children's magazine, described the game in detail, referring to it as a *jeu japonais* (“Japanese game”). Its French name, *Chi-fou-mi*, is based on the Old Japanese words for “one, two, three” (*hi*, *fu*, *mi*).

A 1932 *New York Times* article on Tokyo's rush hour explained the game's rules for American readers, suggesting that it was not yet widely known in the U.S. at the time. The 1933 edition of *Compton's Pictured Encyclopedia* described it as a common method for children to settle disputes in Japan, calling it “John Kem Po.” The article even noted, “This is such a good way of deciding an argument that American boys and girls might like to practice it too.”

# Chapter III

## Exercise 00 : ft\_strcmp


	Exercise 00
ft_strcmp	
Turn-in directory : <i>ex00/</i>	
Files to turn in : <b>ft_strcmp.c</b>	
Allowed functions : None	

- Reproduce the behavior of the function `strcmp` (man `strcmp`).
- The function should be prototyped as follows:

```
int      ft_strcmp(char *s1, char *s2);
```

# Chapter IV

## Exercise 01 : ft\_strncmp


	Exercise 01
ft_strncmp	
Turn-in directory : <i>ex01/</i>	
Files to turn in : <b>ft_strncmp.c</b>	
Allowed functions : None	

- Reproduce the behavior of the function `strncmp` (man `strncmp`).
- The function should be prototyped as follows:

```
int      ft_strncmp(char *s1, char *s2, unsigned int n);
```

# Chapter V

## Exercise 02 : ft\_strcat

	Exercise 02
	ft_strcat
	Turn-in directory : <i>ex02/</i>
	Files to turn in : <b>ft_strcat.c</b>
	Allowed functions : <b>None</b>


- Reproduce the behavior of the function `strcat` (man `strcat`).
- The function should be prototyped as follows:

```
char *ft_strcat(char *dest, char *src);
```



# Chapter VI

## Exercise 03 : ft\_strncat


	Exercise 03
	ft_strncat
	Turn-in directory : <i>ex03/</i>
	Files to turn in : <b>ft_strncat.c</b>
	Allowed functions : <b>None</b>

- Reproduce the behavior of the function `strncat` (man `strncat`).
- The function should be prototyped as follows:

```
char *ft_strncat(char *dest, char *src, unsigned int nb);
```

# Chapter VII

## Exercise 04 : ft\_strstr


	Exercise 04
ft_strstr	
Turn-in directory : <i>ex04/</i>	
Files to turn in : <b>ft_strstr.c</b>	
Allowed functions : <b>None</b>	

- Reproduce the behavior of the function **strstr** (man strstr).
- The function should be prototyped as follows:

```
char *ft_strstr(char *str, char *to_find);
```

# Chapter VIII

## Exercise 05 : ft\_strlcat

	Exercise 05
	ft_strlcat
	Turn-in directory : <i>ex05/</i>
	Files to turn in : <b>ft_strlcat.c</b>
	Allowed functions : <b>None</b>

- Reproduce the behavior of the function `strlcat` (man `strlcat`).
- The function should be prototyped as follows:

```
unsigned int ft_strlcat(char *dest, char *src, unsigned int size);
```

# Chapter IX

## Submission and peer-evaluation

Submit your assignment in your `Git` repository as usual. Only the work inside your repository will be evaluated during the defense. Make sure to double-check the names of your files to ensure they are correct.



You must submit only the files explicitly requested by the project requirements.