

C Piscine
Day 24

Staff 42 pedago@42.fr

Summary: THE FOLLOWING TAKES PLACE BETWEEN 10.00 P.M. AND 11.00 P.M.

$\bigcirc$	1	1
	nte	nts
$\sim$		'TTUN

Ι	Instructions	2
II	Foreword	4
III	$ft\_collatz\_conjecture.c$	5

## Chapter I

#### Instructions

- Only this page will serve as reference: do not trust rumors.
- Watch out! This document could potentially change up to an hour before submission.
- Make sure you have the appropriate permissions on your files and directories.
- You have to follow the submission procedures for every exercise.
- Your exercises will be checked and graded by your fellow classmates.
- On top of that, your exercises will be checked and graded by a program called Moulinette.
- Moulinette is very meticulous and strict in its evaluation of your work. It is entirely automated and there is no way to negotiate with it. So if you want to avoid bad surprises, be as thorough as possible.
- Moulinette is not very open-minded. It won't try and understand your code if it doesn't respect the Norm.
- Using a forbidden function is considered cheating. Cheaters get -42, and this grade is non-negotiable.
- If ft\_putchar() is an authorized function, we will compile your code with our ft\_putchar.c.
- You'll only have to submit a main() function if we ask for a <u>program</u>.
- Moulinette compiles with these flags: -Wall -Wextra -Werror, and uses gcc.
- If your program doesn't compile, you'll get 0.
- Exercises in Shell must be executable with /bin/sh..

C Piscine

Day 24

- $\bullet$  You <u>cannot</u> leave <u>any</u> additional file in your directory than those specified in the subject.
- Got a question? Ask your peer on the right. Otherwise, try your peer on the left.
- Your reference guide is called Google / man / the Internet / ....
- Check out the "C Piscine" part of the forum on the intranet.
- Examine the examples thoroughly. They could very well call for details that are not explicitly mentioned in the subject...
- By Odin, by Thor! Use your brain!!!

### Chapter II

### Foreword

It was a banal night for Anastacia and Natasha, twin sisters at the armed wing of Operation Twilight. At the back of the van in motion, heading to the CTU New York, the Counter-Terrorist Unity of the country, they were reviewing their troops.

"We are night workers in charge of cleaning the building. You, the bearded, what is your role?

"My name is Thar," the man explained in his blue overalls. I am a tile washer.

"And I am Zoz," commented his neighbor, accoutred in the same way. My specialty: defective plumbing.

- Nice work guys, for once some learn their text! Now shut up, we're talking about us on the radio. "

" . . . a safe explosion for wildlife. Already on Truiteur, the reactions flock: hashtag snookiboomboom is in the world trends. For WSKID, it was Fabriana, on the spot, who continues to follow the case . . . "  $\,$ 

"No, but this information," shouted the driver of the taxi that brings Nick Bauer also to the CTU, what bullshit! "

In the back seat of the vehicle, Nick had to make claims of a mere mortal.

"What's on the radio?" An explosive shit that did not even make a single death! If it was me, Sebastian B., oh no, we would not talk about such futile things! "

"He's a fool," thought Nick. I had better continue to hack this Surface 8 tablet soon discharged. The password is a kind of mathematical puzzle . . . "  $\,$ 

Neither do you listen to the nonsense of the taxi driver: Write a program that can calculate the tablet password.

# Chapter III

# $ft\_collatz\_conjecture.c$

	Exercise 07	
/	ft_collatz_conjecture.c	
Turn-in directory : $ex07/$		
Files to turn in : ft_collatz_conjecture.c		/
Allowed functions : None		/
Notes : n/a		

- Create a function ft\_collatz\_conjecture which will return the "flight time" for a given argument.
- This function must be recursive.
- Here's how it should be prototyped:

unsigned int ft\_collatz\_conjecture(unsigned int base);