

C Piscine
Day 00

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Summary: This document is the subject for Day00 of the C Piscine @ 42.

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#### 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.
- These exercises are carefully laid out by order of difficulty from easiest to hardest. We will not take into account a successfully completed harder exercise if an easier one is not perfectly functional.
- 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.
- Exercises in Shell must be executable with /bin/sh.
- 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!!!



The time and date displayed on the intra indicate the deadline for your submission. Past that deadline, you won't be able to hand in anything more. These time and date also indicate the start of the peer-evaluation period for the corresponding C Piscine date. This peer-evaluation period lasts exactly 24hrs. Once those 24hrs are up, your missing peer-grading will become Os and you'll receive Moulinette's grade.

#### Chapter II

#### Foreword

Here are the lyrics for City Hunter's theme song "Moonlight Shadow":

The last time ever she saw him
Carried away by a moonlight shadow
He passed on worried and warning
Carried away by a moonlight shadow.
Lost in a riddle that Saturday night
Far away on the other side.
He was caught in the middle of a desperate fight
And she couldn't find how to push through

The trees that whisper in the evening Carried away by a moonlight shadow Sing a song of sorrow and grieving Carried away by a moonlight shadow All she saw was a silhouette of a gun Far away on the other side.

He was shot six times by a man on the run And she couldn't find how to push through

[Chorus]
I stay, I pray

See you in Heaven far away...

I stay, I pray

See you in Heaven one day.

Four A.M. in the morning
Carried away by a moonlight shadow
I watched your vision forming
Carried away by a moonlight shadow
A star was glowing in the silvery night
Far away on the other side
Will you come to talk to me this night
But she couldn't find how to push through

[Chorus]

C Piscine

Day 00

Far away on the other side.
Caught in the middle of a hundred and five
The night was heavy and the air was alive
But she couldn't find how to push through
Carried away by a moonlight shadow
Carried away by a moonlight shadow
Far away on the other side.

Unfortunately, this topic has nothing to do with City Hunter.

#### Chapter III

## Exercise 00: Pre-requisites

	Exercise: 00	
/	Pre-requisites	
Notes : n/a		

- Write an e-mail to norminet@42.fr.
- The subject of that email should be:

[Most awesome cat in the world] [login] [let me flatter you]

• Write nice things in the e-mail, using at least the following words:

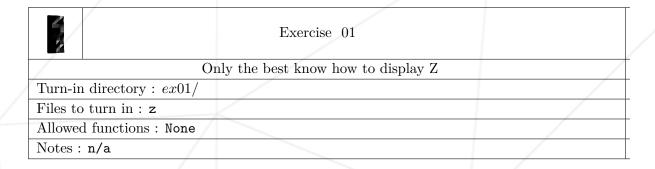
42; autograph; master of the Universe; handsome; strong; idol; huge; crank handle



Evidently "login" will be YOUR login.

## Chapter IV

Exercise 01 : Z

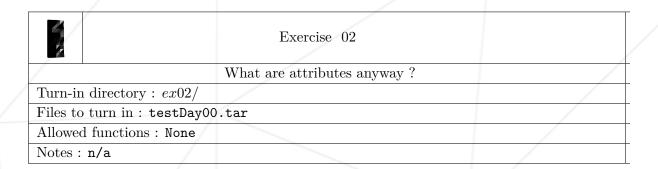


 $\bullet$  Create a file called z that returns "Z", followed by a new line, whenever the command cat is used on it.

?>cat z
Z

#### Chapter V

#### Exercise 02: testDay00



- Create a file called testDay00 in your submission directory.
- Figure out a way for the output to look like this (except for the "total 1" line):

```
%> ls -l
total 1
-r--r-xr-x 1 XX XX 40 Jun 1 23:42 testDay00
%>
```

• Once you've achieved the previous steps, execute the following command to create the file to be submitted: tar -cf testDay00.tar testDay00.



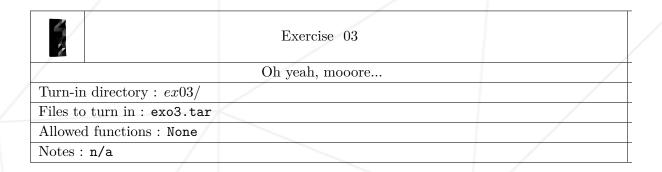
Don't worry about what you've got instead of "XX".



A year will be accepted instead of the time, on the timestamp of the file

#### Chapter VI

Exercise 03: Oh yeah, mooore...



• Create the following files and directories. Do what's necessary so that when you use the ls -1 command in your directory, the output will looks like this:

```
%> ls -1
total XX
drwx--xr-x   2 XX   XX   XX   Jun   1 20:47 test0
-rwx--xr--   1 XX   XX   4 Jun   1 21:46 test1
dr-x--r--   2 XX   XX   XX   Jun   1 22:45 test2
-r---r--   2 XX   XX   XX   1 Jun   1 23:44 test3
-rw-r---x   1 XX   XX   2 Jun   1 23:43 test4
-r---r--   2 XX   XX   1 Jun   1 23:44 test5
lrwxr-xr-x   1 XX   XX   5 Jun   1 22:20 test6 -> test0
%>
```

• Once you've done that, run tar -cf exo3.tar \* to create the file to be submitted.



Don't worry about what you've got instead of "XX".

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### Chapter VII

#### Exercise 04: Connect me!

	Exercise 04	
/	Kerberos	
Turn-in directory : $ex04/$		
Files to turn in: klist.txt		
Allowed functions: None		
Notes : n/a		

- Make sure you have a valid (non-expired) Kerberos ticket. If you don't have one yet, get one.
- Once you've got at least one Kerberos ticket, write a list of all your tickets into a file named klist.txt



The file's name was not chosen randomly.



Those commands will be of use later in the day, so try not to forget them!

# Chapter VIII

Exercise 05: midLS

	Exercise 05	
/	$\operatorname{midLS}$	
Turn-in directory : $ex05/$		
Files to turn in : midLS		
Allowed functions : None		
Notes : n/a		

• In a midLS file, place the command line that will list all files and directories in your current directory (except for hidden files or any file that starts by a dot - yes, that includes double-dots), separated by a comma, by order of creation date. Make sure directories' names are followed by a slash character.



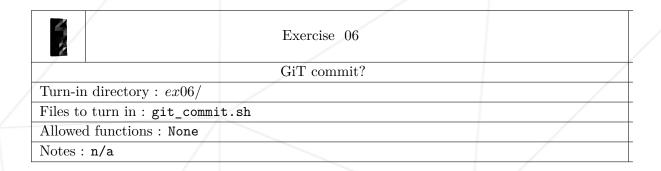
What has not been asked for should not be done!



RTFM!

#### Chapter IX

Exercise 06: GiT commit



• Understanding and using GiT is a very important skill for a developper, may it be for your piscine, your formation or your professional life. In this exercice, you will have to list the 5 last commits' id. Example:

%> bash git\_commit.sh | cat -e baa23b54f0adb7bf42623d6d0a6ed4587e11412a\$ 2f52d74b1387fa80eea844969e8dc5483b531ac1\$ 905f53d98656771334f53f59bb984fc29774701f\$ 5ddc8474f4f15b3fcb72d08fcb333e19c3a27078\$ e94d0b448c03ec633f16d84d63beaef9ae7e7be8\$ %>



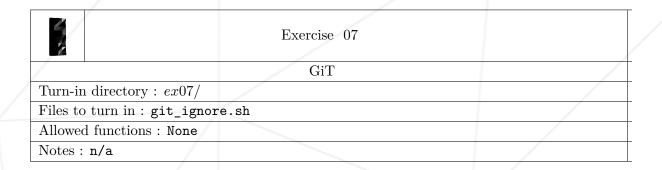
To test your script, we will use our own environment. What's not asked for should not be done!



RTFM!

#### Chapter X

Exercise 07: gitignore



• In this exercice, you will write a short shell script that lists all the existing files ignored by your GiT repository. Example:

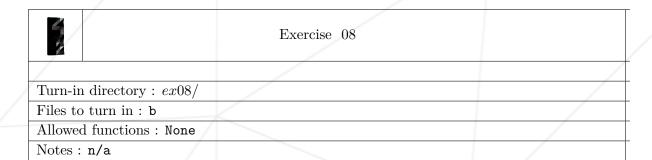
```
%> bash git_ignore.sh | cat -e
.DS_Store$
mywork.c~$
%>
```

To test your script, we will use our own environment.



#### Chapter XI

Exercise 08: diff



• Create a file b, so that:

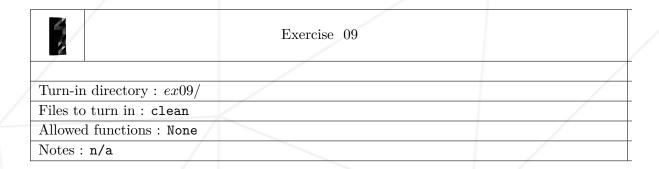
%>diff a b > sw.diff



man patch

#### Chapter XII

#### Exercise 09: clean



- ullet In a file called clean place the command line that will search for all files in the current directory as well as in its sub-directories with a name ending by  $\sim$ , or a name that start and end by #
- The command line will show and erase all files found.
- Only one command is allowed: no ';' or '&&' or other shenanigans.



man find

# Chapter XIII

# Exercise 10: Illusions, not tricks, Michael...

	Exercise 10	
	Illusions, not tricks, Michael	
Turn-in directory : $ex10/$		
Files to turn in : ft_magic		
Allowed functions: None		
Notes : n/a		

• Create a magic file called ft\_magic that will be formatted appropriately to detect files of 42 file type, built with a "42" string at the 42nd byte.



man file