



C Piscine

Day 00

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

Contents

I	Instructions	2
II	Foreword	4
III	Exercise 00 : Pre-requisites	6
IV	Exercise 01 : Z	7
V	Exercise 02 : testDay00	8
VI	Exercise 03 : Oh yeah, mooore...	9
VII	Exercise 04 : Connect me!	11
VIII	Exercise 05 : midLS	12
IX	Exercise 06 : GiT commit	13
X	Exercise 07 : gitignore	14
XI	Exercise 08 : diff	15
XII	Exercise 09 : clean	16
XIII	Exercise 10 : Illusions, not tricks, Michael...	17

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 cannot leave any 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 0s 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]

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 `krp@42.fr`.
- The subject of that email should be:

`[Sir general deputy director][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


	Exercise 01
Only the best know how to display Z	
Turn-in directory : <i>ex01/</i>	
Files to turn in : z	
Allowed functions : None	
Notes : n/a	

- 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

	Exercise 02
What are attributes anyway ?	
Turn-in directory : <i>ex02/</i>	
Files to turn in : testDay00.tar	
Allowed functions : None	
Notes : n/a	

- 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...

	Exercise 03
Oh yeah, mooore...	
Turn-in directory : <i>ex03/</i>	
Files to turn in : exo3.tar	
Allowed functions : None	
Notes : n/a	

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

```
$> ls -l
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   1 Jun  1 23:44 test3
-rw-r----- 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".



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

Chapter VII

Exercise 04 : Connect me!

	Exercise 04
Kerberos	
Turn-in directory : <i>ex04/</i>	
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
midLS	
Turn-in directory : <i>ex05/</i>	
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

	Exercise 06
GiT commit?	
Turn-in directory : <i>ex06/</i>	
Files to turn in : <i>git_commit.sh</i>	
Allowed functions : None	
Notes : n/a	

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

```
$> bash git_commit.sh
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

	Exercise 07
GiT	
Turn-in directory : <i>ex07/</i>	
Files to turn in : <code>git_ignore.sh</code>	
Allowed functions : None	
Notes : n/a	

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

```
$> bash git_ignore.sh
.DS_Store
mywork.c~
```


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



RTFM!

Chapter XI

Exercise 08 : diff

	Exercise 08
Turn-in directory : <i>ex08/</i>	
Files to turn in : b	
Allowed functions : None	
Notes : n/a	

- Create a file **b**, so that :

```
%>cat -e a
STARWARS$
Episode IV, A NEW HOPE It is a period of civil war.$
$
Rebel spaceships, striking from a hidden base, have won their first victory against the evil
Galactic Empire.$
During the battle, Rebel spies managed to steal secret plans to the Empire's ultimate weapon, the
DEATH STAR,$
an armored space station with enough power to destroy an entire planet.$
$
Pursued by the Empire's sinister agents, Princess Leia races home aboard her starship, custodian of
the stolen plans that can save her people and restore freedom to the galaxy...$
$
```


```
%>diff a b > sw.diff
```



man patch

Chapter XII

Exercise 09 : clean

	Exercise 09
Turn-in directory : <i>ex09/</i>	
Files to turn in : clean	
Allowed functions : None	
Notes : n/a	


- 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 ~, 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 : <i>ex10/</i>	
Files to turn in : <code>ft_magic</code>	
Allowed functions : <code>None</code>	
Notes : <code>n/a</code>	

- 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