

Piscine
Shell 00

Summ ry: This document is the subject for the Shell 00 module of the C Piscine @ 42.

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Ch pter 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? sk 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...

Ch pter 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
nd 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
Il 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
nd 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 .M. in the morning
Carried away by a moonlight shadow
I watched your vision forming
Carried away by a moonlight shadow
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 Shell 00

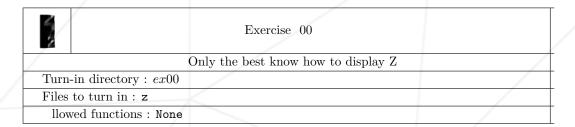
Far away on the other side.

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.

Ch pter III

Exercise 00: Z



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

?>cat z
Z
?>

Ch pter IV

Exercise 01: testShell00



Exercise 01

What are attributes anyway?

Turn-in directory : ex01

Files to turn in: testShell00.tar

llowed functions: None

Create a file called testShell00 in your submission directory.

Figure out a way for the output to look like this (except for the "total 1" line):

```
%> ls -1
total 1
-r--r-xr-x 1 XX XX 40 Jun 1 23:42 testShell00
%>
```

Once you've achieved the previous steps, execute the following command to create the file to be submitted: tar -cf testShell00.tar testShell00.



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



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

Ch pter V

Exercise 02: Oh ye h, mooore...

	Exercise 02	
	Oh yeah, mooore	
Turn-in directory : $ex02$		
Files to turn in : exo2.tar		
llowed functions : None		

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

```
%> 1s -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----- 2 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
lrwxrwxrwx 1 XX XX 5 Jun 1 22:20 test6 -> test0
%>
```

Once you've done that, run tar -cf exo2.tar * to create the file to be submitted.



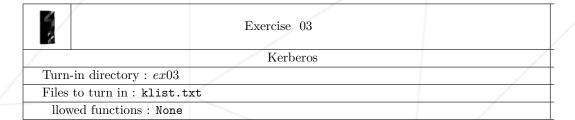
Don't worry about what you've got instead of "XX".



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

Ch pter VI

Exercise 03: Connect me!



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



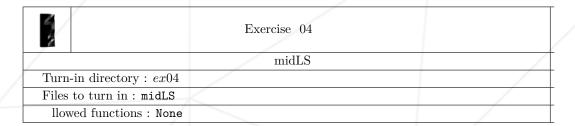
The file's name was not chosen randomly.



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

Ch pter VII

Exercise 04: midLS



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 date.



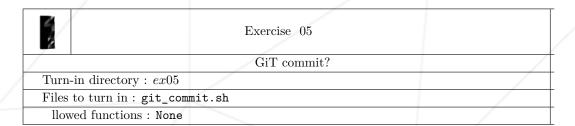
What has not been asked for should not be done!



RTFM

Ch pter VIII

Exercise 05: GiT commit



Create a shell script that displays the ids of the last 5 commits of your git repository.

```
%> bash git_commit.sh | cat -e
baa23b54f0adb7bf42623d6d0a6ed4587e11412a$
2f52d74b1387fa80eea844969e8dc5483b531ac1$
905f53d98656771334f53f59bb984fc29774701f$
5ddc8474f4f15b3fcb72d08fcb333e19c3a27078$
e94d0b448c03ec633f16d84d63beaef9ae7e7be8$
%>
```

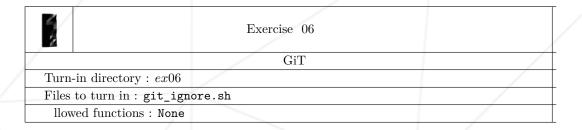
To test your script, we will use our own environment.



RTFM!

Ch pter IX

Exercise 06: 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.



RTFM!

Ch pter X

Exercise 07: diff



Exercise 07

Turn-in directory: ex07
Files to turn in: b
llowed functions: None

Create a file b, so that:

%>diff a b > sw.diff



man patch

Ch pter XI

Exercise 08 : cle n



Exercise 08

Turn-in directory : ex08
Files to turn in : clean
llowed functions : None

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

Ch pter XII

Exercise 09 : Illusions, not tricks, Mich el...

-		
	Exercise 09	
	Illusions, not tricks, Michael	
Turn-in directory: ex09		
Files to turn in : ft_mag	gic	
llowed functions : None		

Create a magic file called ${\tt ft_magic}$ that will be formatted appropriately to detect files of 42 file type, built with a "42" string at the 42nd byte.



man file