C - Pool - Tek1

Subject Day 02

C Pool Managers
looneytunes@epitech.eu

Contents

Instructions 2

Exercise 1 - The beginning 3

Exercise 2 - how_many_are_we.sh 4

Exercise 3 - find_sh.sh 5

Exercise 4 - count_files.sh 6

Exercise 5 - gotta_catch_them_all.sh 7

Exercise 6 - prepare_my_repo.sh 8

Exercise 7 - push_that.sh 9

Exercise 8 - Utilitaire (Bonus) 10

Exercise 9 - Encrypted 11

Exercise 10 - skip.sh 12

Exercise 11 - r_tacpy.sh 13

Instructions

- Any request for precisions on a subject will complicate it.
- The subject may change until one hour before turn-in.
- Don't forget to discuss about it in the pool section of the forum !
- You must keep your turn-in directory clean. No other files are allowed than those explicitly specified by the exercises.
  Otherwise, our robot might not be able to correct your project and you will get `0`.
- Turn-in directory:
  `Piscine_C_J02`

Hints

```
To turn-in your project:
Create a 'rendu' directory in your home.
Go into this new directory:  cd ~/rendu
You must create here the turn-in directory specified in the
subject.
Go into this new directory:  cd ~/rendu/Piscine_C_J02
Remember it is always better to create your repository at the
beginning of the day and to turn-in your work on a regular basis
```

Exercise 1 - The beginning

- You will need a little ressources in order to complete today's exercices.
- Therefore, we invite you to clone the repository: "`git.epitech.eu:/looneytunes/j02`"

 *Hints* `The content of this repository can change during the day. Remember to keep it up to date.`

 *Hints* `Read rights on the repository were given to you as soon as you finished yesterday's exercice: needlooneyrights`

Exercise 2 - how_many_are_we.sh

- Write a script named "`how_many_are_we.sh`" which displays the number of students in the city in parameter. If no parameter is given, the script displays the total number of students.
- Use the file "`students.csv`" in order to gather the data.
- We will use our own file, do not commit your's - if you do, you will lose points.
- The parameter will always be correct and well formated

```
?> cat ~/moulinette/students.csv | ./how_many_are_we.sh ncy
```

 *Hints* `As soon as we are taking about a script, remember to set the execution rights`

 *Hints* `Having trouble finding how to retrieve parameters? man bash`

Exercise 3 - find_sh.sh

- Write a script named "`find_sh.sh`" which seek every files whose names finish by "`.sh`" in the current folder and all its sub-folders. (without the quotes) and only displays their name, with the trailing "`.sh`"

Exercise 4 - count_files.sh

- Write a scripts named "`count_files.sh`" which displays the number of "normal" files in the current folder and all its sub-folders.

 *Hints* `Read carefully the man of find`

Exercise 5 - gotta_catch_them_all.sh

- Write a script named "`gotta_catch_them_all.sh`" which displays the number of users whose surname starts with "`martin`".
- Use the file passwd in j02.

```
?> cat ~/moulinette/passwd | ./gotta_catch_them_all.sh
```

Exercise 6 - prepare_my_repo.sh

- Write a script named "`prepare_my_repo.sh`" which, as its name suggests, will:
- Create the repository the name is given as an argument
- Add pick-up rights
- Displays the repository's acl

```
Output example
?> ./prepare_my_repo.sh Corewar
Reporitory Corewar created
ACL correctly applied
ramassage-tek:r
?>
```

 *Hints* Toons are almighty and their copy of blih won't ever dare to ask them to type a password

Exercise 7 - push_that.sh

- Write a script named "`push_that.sh`" which will add every files of the current folder and push them to the repository.
- It is supposed to handle simple conflics and still push your files.

`Caution, don't use this script if you share this repository with other people`

Exercise 8 - Utilitaire (Bonus)

- In order to use your scripts from anywhere, you might want to create a folder named "`bin`" in your home "`~/bin`" and copy your useful scripts in that folder.
- Commands you use in a shell must be located in a folder listed in the environment variable `PATH`.
- You want to add you folder "`~/bin`" in the `$PATH` variable.
- To do so, change the config of the file "`~/.bashrc`".

Hints `Carefully read the man of env`

Exercise 9 - Encrypted

- The content of the exercice can be found in j02 but is encoded using a substitution cipher.
- Here is the key : "`LONEYTUSARFPDHIKZBCGJMQVWX`"
- The result can be obtained using a single command line

Exercise 10 - skip.sh

- Write a script named "`skip.sh`" which take the output of a "`ls -l`" and displays only alternate rows by starting with the first one.

```
?> ls -l | ./skip.sh
```

Exercise 11 - r_tacpy.sh

- Write a script named "`r_tacpy.sh`" which retrieve the output of a "`cat passwd`", and displays every other line starting on the second one reversing every letter of each login sorting them in the reverse order, only keeping logins between MY_LINE1 and MY_LINE2 inclusive, separated by ", " (without quotes) and finnishing with a ".".
- Example : Between lines 24 and 42, the result is :

```
z_iew, z_idauoj, z_hcinh, z_habsem_ante, z_guomah, z_girdor, z_farhca,
z_evuohc, z_ettorb, z_etset, z_etanok, z_elliap, z_ehkuob, zeek, zdud,
z_dnarud, z_dahuob, z_cdadah, z_azhral_ante.
```

Hints `MY_LINE1 and MY_LINE2 are environment variables.`