



EXERCISES — The Right Tarball

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**The way is lit. The path is clear.
We require only the strength to follow it.**

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File Tree

```
right_tarball/  
└─ my_tarball.tar.gz  (to submit)
```

Authorized commands : You are only allowed to use the following commands

- `builtins`
- `touch(1)`
- `mkdir(1)`
- `chmod(1)`

Reminder : Grant execution permission to your scripts before pushing them

1 Goal

Generate a tarball with a specific architecture and permissions.

Start by creating a folder `my_tarball` at the root of your exercise directory.

2 File handling and permissions

This section must be done inside the `my_tarball` folder.

To check that you have understood notions about how to handle files, directories and their associated permissions correctly, you must:

- create an `AUTHORS` file and modify its permissions. An `AUTHORS` file contains any information about the author(s) of a project. It must have the 640 mode and must not be empty.
- create a new directory named `doc`. It must have the 700 mode.

Tips

A conventional `AUTHORS` file contains a line that can easily be parsed:

```
42sh$ cat -e AUTHORS  
* prenom.nom$
```

Tips

If the octal permission system is still unclear to you, take time to read the `chmod` manual.

Once this is done, you must create a text file containing at least 5 lines, correctly wrapped at 80 columns - no line should exceed 80 characters. You can use the features of your text editor (Vim or Emacs) to handle the text formatting:

- this file must be named `rights`, located in the `doc` directory you just created, and have the 640 access rights.

If you lack imagination, you can write about the permission system and the different commands you can use to manipulate them.

Finally, we want you to write a script, this script should be placed as follow:

- you must create an `src` directory having the 755 mode.
- the script must be located in an `src` directory and named `authors.sh` with the 644 access rights - thus, not executable.

The script have to handles the *creation* and the *permission modification* of an `AUTHORS` file in the current working directory - the directory in which you are when running the script. The permission made by the script **must** be the same as the `AUTHORS` created before (so 640 access rights).

3 Assignment tarball

A tarball is often used for **backups** or **releases** purposes. In a release, you generally find information about the author(s) of the project, some documentation and source code. Let us make one.

To validate this exercise, you must compress your previous work in a tarball and submit it.

Your tarball must be called `my_tarball.tar.gz`. This file must be a tar archive compressed in the *gzip* format. Take time to read the manual of `tar` to find out how to create this archive.

The tarball must contain the directory `my_tarball` and all its content.

Be careful!

Do not include any trash or git related file.

Tips

You can check that your submission is correct by comparing it with this output:

```
42sh$ tar tf my_tarball.tar.gz
my_tarball/
my_tarball/AUTHORS
my_tarball/doc/
my_tarball/doc/rights
my_tarball/src/
my_tarball/src/authors.sh
```

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