Shell, permissions

0. My name is Betty
mandatory

Create a script that switches the current user to the user `betty`.

- You should use exactly 8 characters for your command (+1 character for the new line)
- You can assume that the user `betty` will exist when we will run your script

```
julien@ubuntu:/tmp/h$ tail -1 0-iam_betty | wc -c

9

julien@ubuntu:/tmp/h$
```

Repo:

- GitHub repository: `shell`
- Directory: `permissions`
- File: `0-iam_betty`

1. Who am I
mandatory

Write a script that prints the effective username of the current user.

```
julien@ubuntu:/tmp/h$ ./1-who_am_i

julien

julien@ubuntu:/tmp/h$
```

Repo:

- GitHub repository: `shell`
- Directory: `permissions`
- File: `1-who_am_i`

2. Groups
mandatory

Write a script that prints all the groups the current user is part of.

```
julien@ubuntu:/tmp/h$ ./2-groups

julien adm cdrom sudo dip plugdev lpadmin sambashare

julien@ubuntu:/tmp/h$
```

Note: depending on the user, you will get a different output.

Repo:

- GitHub repository: `shell`

- Directory: `permissions`
- File: `2-groups`

3. New owner
Write a script that changes the owner of the file `hello` to the user `betty`.

```
julien@ubuntu:/tmp/h$ ls -l
total 4
-rwxrw-r-- 1 julien julien 30 Sep 20 14:23 3-new_owner
-rw-rw-r-- 1 julien julien  0 Sep 20 14:18 hello
julien@ubuntu:/tmp/h$ sudo ./3-new_owner
julien@ubuntu:/tmp/h$ ls -l
total 4
-rwxrw-r-- 1 julien julien 30 Sep 20 14:23 3-new_owner
-rw-rw-r-- 1 betty  julien  0 Sep 20 14:18 hello
julien@ubuntu:/tmp/h$
```

Repo:

- GitHub repository: `shell`
- Directory: `permissions`
- File: `3-new_owner`

4. Empty!
Write a script that creates an empty file called `hello`.

Repo:

- GitHub repository: `shell`
- Directory: `permissions`
- File: `4-empty`

5. Execute
Write a script that adds execute permission to the owner of the file `hello`.

- The file `hello` will be in the working directory

```
julien@ubuntu:/tmp/h$ ls -l
total 8
-rwxrw-r-- 1 julien julien 28 Sep 20 14:26 5-execute
-rw-rw-r-- 1 julien julien 23 Sep 20 14:25 hello
julien@ubuntu:/tmp/h$ ./hello
```

```
bash: ./hello: Permission denied

julien@ubuntu:/tmp/h$ ./5-execute

julien@ubuntu:/tmp/h$ ls -l

total 8

-rwxrw-r-- 1 julien julien 28 Sep 20 14:26 5-execute

-rwxrw-r-- 1 julien julien 23 Sep 20 14:25 hello

julien@ubuntu:/tmp/h$
```

Repo:

- GitHub repository: `shell`
- Directory: `permissions`
- File: `5-execute`

6. Multiple permissions
mandatory

Write a script that adds execute permission to the owner and the group owner, and read permission to other users, to the file `hello`.

- The file `hello` will be in the working directory

```
julien@ubuntu:/tmp/h$ ls -l

total 8

-rwxrw-r-- 1 julien julien 36 Sep 20 14:31 6-multiple_permissions

-r--r----- 1 julien julien 23 Sep 20 14:25 hello

julien@ubuntu:/tmp/h$ ./6-multiple_permissions

julien@ubuntu:/tmp/h$ ls -l

total 8

-rwxrw-r-- 1 julien julien 36 Sep 20 14:31 6-multiple_permissions

-r-xr-xr-- 1 julien julien 23 Sep 20 14:25 hello

julien@ubuntu:/tmp/h$
```

Repo:

- GitHub repository: `shell`
- Directory: `permissions`
- File: `6-multiple_permissions`

7. Everybody!
mandatory

Write a script that adds execution permission to the owner, the group owner and the other users, to the file `hello`

- The file `hello` will be in the working directory
- You are not allowed to use commas for this script

```
julien@ubuntu:/tmp/h$ ls -l
total 8
-rwxrw-r-- 1 julien julien 28 Sep 20 14:35 7-everybody
-rw-r----- 1 julien julien 23 Sep 20 14:25 hello
julien@ubuntu:/tmp/h$ ./7-everybody
julien@ubuntu:/tmp/h$ ls -l
total 8
-rwxrw-r-- 1 julien julien 28 Sep 20 14:35 7-everybody
-rwxr-x--x 1 julien julien 23 Sep 20 14:25 hello
julien@ubuntu:/tmp/h$
```

Repo:

- GitHub repository: `shell`
- Directory: `permissions`

8. James Bond
mandatory
Write a script that sets the permission to the file `hello` as follows:

- Owner: no permission at all
- Group: no permission at all
- Other users: all the permissions

The file `hello` will be in the working directory You are not allowed to use commas for this script

```
julien@ubuntu:/tmp/h$ ls -l
total 8
-rwxrw-r-- 1 julien julien 28 Sep 20 14:40 8-James_Bond
-rwxr-x--x 1 julien julien 23 Sep 20 14:25 hello
julien@ubuntu:/tmp/h$ ./8-James_Bond
julien@ubuntu:/tmp/h$ ls -l
total 8
-rwxrw-r-- 1 julien julien 28 Sep 20 14:40 8-James_Bond
-------rwx 1 julien julien 23 Sep 20 14:25 hello
julien@ubuntu:/tmp/h$
```

Repo:

- GitHub repository: `shell`
- Directory: `permissions`
- File: `8-James_Bond`

Review your work Get a sandbox
0/5 pts

9. John Doe
Write a script that sets the mode of the file `hello` to this:

```
-rwxr-x-wx 1 julien julien 23 Sep 20 14:25 hello
```

- The file `hello` will be in the working directory
- You are not allowed to use commas for this script

Repo:

- GitHub repository: `shell`
- Directory: `permissions`
- File: `9-John_Doe`

10. Look in the mirror
Write a script that sets the mode of the file `hello` the same as `olleh`'s mode.

- The file `hello` will be in the working directory
- The file `olleh` will be in the working directory

```
julien@ubuntu:/tmp/h$ ls -l

total 8

-rwxrw-r-- 1 julien julien 42 Sep 20 14:45 10-mirror_permissions

-rwxr-x-wx 1 julien julien 23 Sep 20 14:25 hello

-rw-rw-r-- 1 julien julien  0 Sep 20 14:43 olleh

julien@ubuntu:/tmp/h$ ./10-mirror_permissions

julien@ubuntu:/tmp/h$ ls -l

total 8

-rwxrw-r-- 1 julien julien 42 Sep 20 14:45 10-mirror_permissions

-rw-rw-r-- 1 julien julien 23 Sep 20 14:25 hello

-rw-rw-r-- 1 julien julien  0 Sep 20 14:43 olleh

julien@ubuntu:/tmp/h$
```

Note: the mode of `olleh` will not always be 664. Make sure your script works for any mode.

Repo:

- GitHub repository: `shell`
- Directory: `permissions`
- File: `10-mirror_permissions`

11. Directories
Create a script that adds execute permission to all subdirectories of the current directory for the owner, the group owner and all other users. Regular files should not be changed.

```
julien@ubuntu:/tmp/h$ ls -l
total 20
-rwxrwxr-x 1 julien julien   24 Sep 20 14:53 11-directories_permissions
drwx------ 2 julien julien 4096 Sep 20 14:49 dir0
drwx------ 2 julien julien 4096 Sep 20 14:49 dir1
drwx------ 2 julien julien 4096 Sep 20 14:49 dir2
-rw-rw-r-- 1 julien julien   23 Sep 20 14:25 hello
julien@ubuntu:/tmp/h$ ./11-directories_permissions
julien@ubuntu:/tmp/h$ ls -l
total 20
-rwxrwxr-x 1 julien julien   24 Sep 20 14:53 11-directories_permissions
drwx--x--x 2 julien julien 4096 Sep 20 14:49 dir0
drwx--x--x 2 julien julien 4096 Sep 20 14:49 dir1
drwx--x--x 2 julien julien 4096 Sep 20 14:49 dir2
-rw-rw-r-- 1 julien julien   23 Sep 20 14:25 hello
julien@ubuntu:/tmp/h$
```

Repo:

- GitHub repository: shell
- Directory: permissions
- File: 11-directories_permissions

12. More directories

Create a script that creates a directory called my_dir with permissions 751 in the working directory.

```
julien@ubuntu:/tmp/h$ ls -l
total 20
-rwxrwxr-x 1 julien julien   39 Sep 20 14:59 12-directory_permissions
drwx--x--x 2 julien julien 4096 Sep 20 14:49 dir0
drwx--x--x 2 julien julien 4096 Sep 20 14:49 dir1
drwx--x--x 2 julien julien 4096 Sep 20 14:49 dir2
-rw-rw-r-- 1 julien julien   23 Sep 20 14:25 hello
julien@ubuntu:/tmp/h$ ./12-directory_permission s
julien@ubuntu:/tmp/h$ ls -l
total 24
-rwxrwxr-x 1 julien julien   39 Sep 20 14:59 12-directory_permissions
drwx--x--x 2 julien julien 4096 Sep 20 14:49 dir0
```

```
drwx--x--x 2 julien julien 4096 Sep 20 14:49 dir1
drwx--x--x 2 julien julien 4096 Sep 20 14:49 dir2
drwxr-x--x 2 julien julien 4096 Sep 20 14:59 my_dir
-rw-rw-r-- 1 julien julien   23 Sep 20 14:25 hello
julien@ubuntu:/tmp/h$
```

Repo:

- GitHub repository: shell
- Directory: permissions
- File: 12-directory_permissions

13. Change group
mandatory

Write a script that changes the group owner to school for the file hello

- The file hello will be in the working directory

```
julien@ubuntu:/tmp/h$ ls -l
total 24
-rwxrwxr-x 1 julien julien   34 Sep 20 15:03 13-change_group
drwx--x--x 2 julien julien 4096 Sep 20 14:49 dir0
drwx--x--x 2 julien julien 4096 Sep 20 14:49 dir1
drwx--x--x 2 julien julien 4096 Sep 20 14:49 dir2
drwxr-x--x 2 julien julien 4096 Sep 20 14:59 my_dir
-rw-rw-r-- 1 julien julien   23 Sep 20 14:25 hello
julien@ubuntu:/tmp/h$ sudo ./13-change_group
julien@ubuntu:/tmp/h$ ls -l
total 24
-rwxrwxr-x 1 julien julien     34 Sep 20 15:03 13-change_group
drwx--x--x 2 julien julien   4096 Sep 20 14:49 dir0
drwx--x--x 2 julien julien   4096 Sep 20 14:49 dir1
drwx--x--x 2 julien julien   4096 Sep 20 14:49 dir2
drwxr-x--x 2 julien julien   4096 Sep 20 14:59 my_dir
-rw-rw-r-- 1 julien school   23 Sep 20 14:25 hello
julien@ubuntu:/tmp/h$
```

Repo:

- GitHub repository: shell
- Directory: permissions
- File: 13-change_group

14. Owner and group
Write a script that changes the owner to vincent and the group owner to staff for all the files and directories in the working directory.

```
julien@ubuntu:/tmp/h$ ls -l
total 24
-rwxrwxr-x 1 julien julien   36 Sep 20 15:06 14-change_owner_and_group
drwx--x--x 2 julien julien 4096 Sep 20 14:49 dir0
drwx--x--x 2 julien julien 4096 Sep 20 14:49 dir1
drwx--x--x 2 julien julien 4096 Sep 20 14:49 dir2
drwxr-x--x 2 julien julien 4096 Sep 20 14:59 my_dir
-rw-rw-r-- 1 julien julien   23 Sep 20 14:25 hello
julien@ubuntu:/tmp/h$ sudo ./14-change_owner_and_group
julien@ubuntu:/tmp/h$ ls -l
total 24
-rwxrwxr-x 1 vincent staff   36 Sep 20 15:06 14-change_owner_and_group
drwx--x--x 2 vincent staff 4096 Sep 20 14:49 dir0
drwx--x--x 2 vincent staff 4096 Sep 20 14:49 dir1
drwx--x--x 2 vincent staff 4096 Sep 20 14:49 dir2
drwxr-x--x 2 vincent staff 4096 Sep 20 14:59 my_dir
-rw-rw-r-- 1 vincent staff   23 Sep 20 14:25 hello
julien@ubuntu:/tmp/h$
```

Repo:

- GitHub repository: shell
- Directory: permissions
- File: 14-change_owner_and_group

15. Symbolic links
Write a script that changes the owner and the group owner
of _hello to vincent and staff respectively.

- The file _hello is in the working directory
- The file _hello is a symbolic link

```
julien@ubuntu:/tmp/h$ ls -l
total 24
-rwxrwxr-x 1 julien julien   44 Sep 20 15:12 15-symbolic_link_permissions
-rw-rw-r-- 1 julien julien   23 Sep 20 14:25 hello
lrwxrwxrwx 1 julien julien    5 Sep 20 15:10 _hello -> hello
```

```
julien@ubuntu:/tmp/h$ sudo ./15-symbolic_link_permissions
julien@ubuntu:/tmp/h$ ls -l
total 24
-rwxrwxr-x 1 julien julien     44 Sep 20 15:12 15-symbolic_link_permission
s
-rw-rw-r-- 1 julien julien     23 Sep 20 14:25 hello
lrwxrwxrwx 1 vincent  staff    5 Sep 20 15:10 _hello -> hello
julien@ubuntu:/tmp/h$
```

Repo:

- GitHub repository: shell
- Directory: permissions
- File: 15-symbolic_link_permissions

16. If only
mandatory

Write a script that changes the owner of the file hello to vincent only if it is owned by the user guillaume.

- The file hello will be in the working directory

```
julien@ubuntu:/tmp/h$ ls -l
total 24
-rwxrwxr-x 1 julien    julien     47 Sep 20 15:18 16-if_only
-rw-rw-r-- 1 guillaume julien     23 Sep 20 14:25 hello
julien@ubuntu:/tmp/h$ sudo ./16-if_only
julien@ubuntu:/tmp/h$ ls -l
total 24
-rwxrwxr-x 1 julien julien     47 Sep 20 15:18 16-if_only
-rw-rw-r-- 1 vincent  julien     23 Sep 20 14:25 hello
julien@ubuntu:/tmp/h$
```

Repo:

- GitHub repository: shell
- Directory: permissions
- File: 16-if_only