Instructions for including Linux commands

It's strongly recommended that you return to the **Manage authorization** lab on managing authorization to include screenshots of your commands as entered in the Bash shell. If this isn't possible, you can also type your commands in this document.

When including samples of Linux commands, consider the following:

- There are multiple applications that can be used to take screenshots. If you're unsure how to take a screenshot on your device, you can perform an online search such as "how to take a screenshot in [your operating system]." Replace "[your operating system]" with the operating system your computer uses.

- Do not include the lab instructions on the right of the screen in your screenshots.

- For any typed commands, highlight your command in gray and use a monospaced font, such as in this example with another command: `grep OS updates.txt`.

Screenshots

Task 1. Check file and directory details

```
researcher2@92b13618ad6e:~$ pwd
/home/researcher2
researcher2@92b13618ad6e:~$ cd /home/researcher2/projects
researcher2@92b13618ad6e:~/projects$ ls
drafts  project_k.txt  project_m.txt  project_r.txt  project_t.txt
researcher2@92b13618ad6e:~/projects$ ls -l
total 20
drwx--x---  2 researcher2 research_team 4096 Jan 20 03:01 drafts
-rw-rw-rw-  1 researcher2 research_team   46 Jan 20 03:01 project_k.txt
-rw-r-----  1 researcher2 research_team   46 Jan 20 03:01 project_m.txt
-rw-rw-r--  1 researcher2 research_team   46 Jan 20 03:01 project_r.txt
-rw-rw-r--  1 researcher2 research_team   46 Jan 20 03:01 project_t.txt
researcher2@92b13618ad6e:~/projects$ []
```

a. I used `pwd` to check my current location
b. Then i navigate to `cd /home/researcher2/projects`
c. List all the files and permission using the command `ls -l`

Task 2. Change file permissions

```
researcher2@92b13618ad6e:~/projects$ ls -la
total 32
drwxr-xr-x 3 researcher2 research_team 4096 Jan 20 03:01 .
drwxr-xr-x 3 researcher2 research_team 4096 Jan 20 03:50 ..
-rw--w---- 1 researcher2 research_team   46 Jan 20 03:01 .project_x.txt
drwx--x--- 2 researcher2 research_team 4096 Jan 20 03:01 drafts
-rw-rw-rw- 1 researcher2 research_team   46 Jan 20 03:01 project_k.txt
-rw-r----- 1 researcher2 research_team   46 Jan 20 03:01 project_m.txt
-rw-rw-r-- 1 researcher2 research_team   46 Jan 20 03:01 project_r.txt
-rw-rw-r-- 1 researcher2 research_team   46 Jan 20 03:01 project_t.txt
researcher2@92b13618ad6e:~/projects$ chmod o-w project_k.txt
researcher2@92b13618ad6e:~/projects$ chmod g-r project_m.txt
researcher2@92b13618ad6e:~/projects$ 
```

  a. Change the file permissions for project_k.txt by removing the write for others. The
      command is `chmod o-w project_k.txt`
  b. I also changed the permission for project_m.txt since that file is restricted for group and
      others. The command is `chmod g-r project_m.txt`

Task 3 Change file permissions on a hidden file

```
researcher2@92b13618ad6e:~/projects$ ls -la
total 32
drwxr-xr-x 3 researcher2 research_team 4096 Jan 20 03:01 .
drwxr-xr-x 3 researcher2 research_team 4096 Jan 20 03:50 ..
-rw--w---- 1 researcher2 research_team   46 Jan 20 03:01 .project_x.txt
drwx--x--- 2 researcher2 research_team 4096 Jan 20 03:01 drafts
-rw-rw-r-- 1 researcher2 research_team   46 Jan 20 03:01 project_k.txt
-rw------- 1 researcher2 research_team   46 Jan 20 03:01 project_m.txt
-rw-rw-r-- 1 researcher2 research_team   46 Jan 20 03:01 project_r.txt
-rw-rw-r-- 1 researcher2 research_team   46 Jan 20 03:01 project_t.txt
researcher2@92b13618ad6e:~/projects$ chmod u-w,g-w g+r .project_x.txt
chmod: cannot access 'g+r': No such file or directory
researcher2@92b13618ad6e:~/projects$ chmod u-w,g-w,g+r .project_x.txt
researcher2@92b13618ad6e:~/projects$ ls -la
total 32
drwxr-xr-x 3 researcher2 research_team 4096 Jan 20 03:01 .
drwxr-xr-x 3 researcher2 research_team 4096 Jan 20 03:50 ..
-r--r----- 1 researcher2 research_team   46 Jan 20 03:01 .project_x.txt
drwx--x--- 2 researcher2 research_team 4096 Jan 20 03:01 drafts
-rw-rw-r-- 1 researcher2 research_team   46 Jan 20 03:01 project_k.txt
-rw------- 1 researcher2 research_team   46 Jan 20 03:01 project_m.txt
-rw-rw-r-- 1 researcher2 research_team   46 Jan 20 03:01 project_r.txt
-rw-rw-r-- 1 researcher2 research_team   46 Jan 20 03:01 project_t.txt
researcher2@92b13618ad6e:~/projects$ 
```

a. Command to show all the hidden files is `ls -la`
b. Change the permissions for .project_x.txt by using the command `chmod u-w,g-w,g+r .project_x.txt`

Task 4. Change directory permissions

```
researcher2@92b13618ad6e:~/projects$ ls -l
total 20
drwx--x--- 2 researcher2 research_team 4096 Jan 20 03:01 drafts
-rw-rw-r-- 1 researcher2 research_team   46 Jan 20 03:01 project_k.txt
-rw------- 1 researcher2 research_team   46 Jan 20 03:01 project_m.txt
-rw-rw-r-- 1 researcher2 research_team   46 Jan 20 03:01 project_r.txt
-rw-rw-r-- 1 researcher2 research_team   46 Jan 20 03:01 project_t.txt
researcher2@92b13618ad6e:~/projects$ chmod g-x drafts
researcher2@92b13618ad6e:~/projects$ ls -l
total 20
drwx------ 2 researcher2 research_team 4096 Jan 20 03:01 drafts
-rw-rw-r-- 1 researcher2 research_team   46 Jan 20 03:01 project_k.txt
-rw------- 1 researcher2 research_team   46 Jan 20 03:01 project_m.txt
-rw-rw-r-- 1 researcher2 research_team   46 Jan 20 03:01 project_r.txt
-rw-rw-r-- 1 researcher2 research_team   46 Jan 20 03:01 project_t.txt
researcher2@92b13618ad6e:~/projects$
```

a. `ls -l` command to display all the directories and files
b. `chmod g-x drafts` to remove the execute permission for the drafts