



# Files, Directories and Permissions

**\*\* NOTE \*\***

You must complete the practice before attempting the assignment

## Assignment 1 (10 Marks)

If we look at the potions.txt file in Snapes directory, we see the following:

```
-rw-r--r--. 1 linuxuser slytherin 0 Jan 24 12:59 potions.txt
```

Change the **ownership** so that snapes is the owner and not linuxuser. Change the **permissions** of the file so that only snapes and slytherin can read and write the file:

```
-rw-rw----. 1 snapes slytherin 0 Jan 27 08:15 potions.txt
```

If we look at Slytherin user permissions we can see that linuxuser owns all the directories and files:

```
drwxr-xr-x. 2 linuxuser slytherin 4096 Jan 24 12:59 Draco
drwxr-xr-x. 2 linuxuser slytherin 4096 Jan 24 12:59 Lucius
drwxr-xr-x. 2 linuxuser slytherin 4096 Jan 24 12:59 Snapes
```

Change the **ownership** of each user's directory structure so that it belongs to the user (ie. Snapes directory and files belong to snapes, Lucius directory and files belong to lucius, etc.). You want the main directory, sub-directories and file **ownerships** changed (recursively) You should see that the owners have changed like this:

```
drwxr-xr-x. 2 draco      slytherin 4096 Jan 24 12:59 Draco
drwxr-xr-x. 2 lucius     slytherin 4096 Jan 24 12:59 Lucius
drwxr-xr-x. 2 snapes     slytherin 4096 Jan 24 12:59 Snapes
```

In Ron's directory in /home/linuxuser/Hogwarts/Gryffindor/Ron, we can see the oldclothes.txt:

```
-rw-r--r--. 1 linuxuser gryffindor 0 Jan 24 12:59 OldClothes.txt
```

Change the **ownership** of the file so that ron owns the file.  
Change the **ownership** and **permissions** so that only ron (owner) and godric (group) can read/write the file:

```
-rw-rw----. 1 ron godric 0 Jan 27 08:15 OldClothes.txt
```



# Files, Directories and Permissions

Create a new directory /home/linuxuser/Hogwarts/Gryffindor/Harry/darkarts

Make sure that only **user** harry can read/write (no one else can have access). Make sure harry is both user and group.

```
drwx-----. 2 harry harry 4096 Jan 27 09:38 darkarts
```

Rename ~/Hogwarts/dumbledoreisdead.txt to ~/Hogwarts/dumbledoreisNOTdead.txt

```
-rw-----. 1 harry harry 0 Jan 27 08:15 dumbledoreisNOTdead.txt
```

Lucius can only get his hair gel from muggles. Change the **ownerships** and **permissions** so that lucius is the owner of ~/Hogwarts/Slytherin/Lucius/hairegel.txt and only the user lucius and the muggles group can read/write the file.

```
-rw-rw----. 1 lucius muggles 0 Jan 27 08:15 hairgel.txt
```

Two muggles were killed by Voldemort - Bryce and Burbidge. Their relatives have requested that the 'killedbyvoldemort.txt' file in their respective directories are **only readable** (not writable). You want bryce to be owner and group for his files and burbidge to be owner and group for his files. The group should not have read access, only the owner.

```
-r-----. 1 bryce bryce 0 Jan 27 08:15 killedbyvoldemort.txt  
-r-----. 1 burbidge burbidge 0 Jan 27 08:15 killedbyvoldemort.txt
```

Create the directories /home/linuxuser/assignment1/find1 and /home/linuxuser/assignment1/find2

Use the find command to:

1. Search the /scripts/work directory
2. Find all files beginning with the letter 'x' (case sensitive)
3. Copy those files to the directory /home/linuxuser/assignment1/find1/

Hint: You will need to use the -exec option

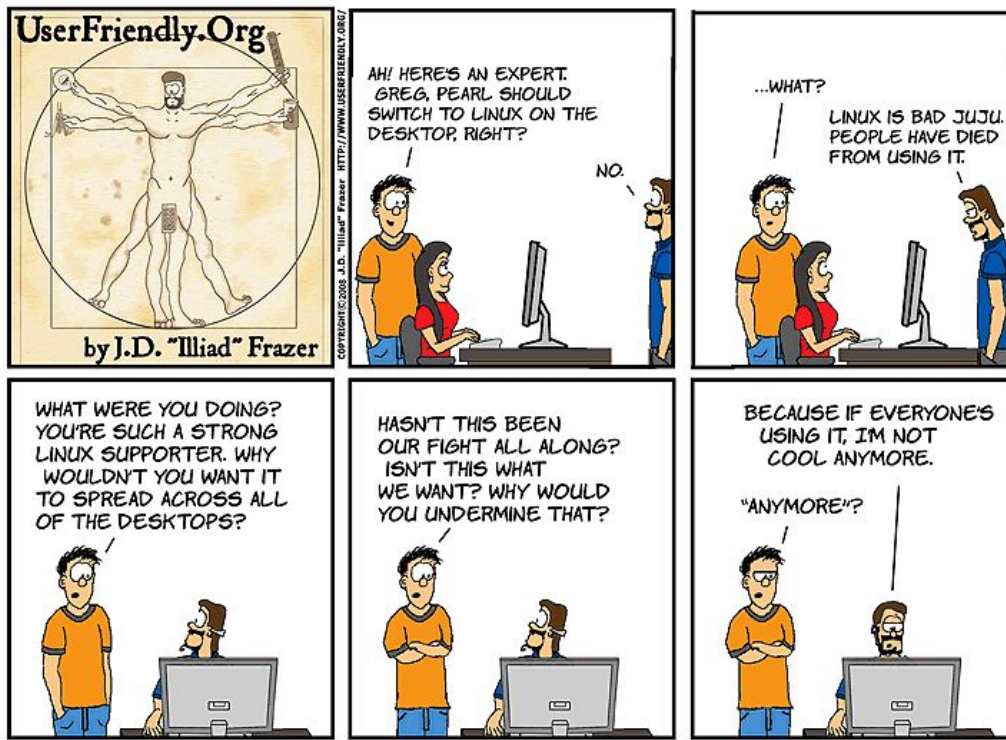
Use the find command to:

1. Search the /scripts/work directory
2. Find only filenames (not directories) that contain the word 'form' anywhere in their name (case insensitive).
3. Copy those files to the directory /home/linuxuser/assignment1/find2/

Hint: You will still need to use the -exec and -type option



# Files, Directories and Permissions



comic courtesy of <http://userfriendly.org>

## Submitting your work

```
sudo /scripts/potter-assignment.sh
```

Question 1: potions.txt - correct permissions

Question 1: potions.txt - correct owner: snapes

Question 1: potions.txt - correct group: slytherin

Question 2: Snapes dir - correct owner: snapes

Question 2: Draco dir - correct owner: draco

Question 2: Draco hairproduct.txt - correct owner: draco

Question 2: Lucius dir - correct owner: lucius

Question 2: Lucius hairgel.txt - correct owner: lucius

Question 3: Ron oldclothes.txt - correct owner: ron

Question 3: Ron oldclothes.txt - correct group: godric

Question 3: Ron oldclothes.txt - correct permissions

Question 4: dir darkarts exists - good.

Question 4: dir darkarts - correct owner: harry

Question 4: dir darkarts - correct group: harry



# Files, Directories and Permissions

!! ERROR !! Question 4: dir darkarts - incorrect permissions - try again.

Question 5: file dumbledoreisNOTdead.txt exists - good.

Question 6: file hairgel.txt - correct owner: lucius

Question 6: file hairgel.txt - correct group: muggles

Question 6: file hairgel.txt - correct permissions

Question 7: bryce file killedbyvoldemort.txt - correct owner: bryce

Question 7: bryce file killedbyvoldemort.txt - correct group: bryce

Question 7: bryce file killedbyvoldemort.txt - correct permissions

Question 7: burbidge file killedbyvoldemort.txt - correct owner: burbidge

Question 7: burbidge file killedbyvoldemort.txt - correct group: burbidge

Question 7: burbidge file killedbyvoldemort.txt - correct permissions

Contents of /home/linuxuser/assignment1

/home/linuxuser/assignment1

```
|— find1
|   |— xenoderm
|   |— xenophobia
|— find2
|   |— cruciformity
|   |— formatter's
|   |— involucriform
|   |— malconformations
```