**IT 3100: Systems Design and Administration I**

**Ownership Count**

Due according to the class [schedule](#).

**Assignment**

In this assignment you will explore which users and groups files in the operating system belong to.

**Requirements**

On the machine [php.cs.dixie.edu](#), you will count how many files belong to each user/group combination. You will do this for each user/group combination that exists, in each of the directory trees `/etc`, `/usr`, and `/var`.

**Details**

- In some of these systems, you will not be able to access all of the files. Report on those you can access.
- For our purposes, directories are files, include them in the count.
- Be sure not to include files that are not local to the hard drive.
- Create a table for each of the directory trees that shows the user/group combination and the number of files found.

**Hint:**

```
ls -lR, awk, sort, and uniq
```

**Hint:** Do them in that order. You could create a table of output for `/var` with a single line... then do it for `/etc` and the other directory.

**Hint2:** Look at the `'-c'` flag for the `uniq` command.

**Hint,** here are some counts I found in `/var` (Spring 2017)

```
2 _apt root
69 man root
46 root adm
1 root crontab
1 root Debian-exim
1 root lxd
1 root mail
1 root mlocate
10399 root root
2 root shadow
1 root staff
1 root syslog
5 root utmp
```

- if you are off by a few, that is ok. Different ways of doing it might result in different counts.

**Submission and Passoff**

- Submit a PDF with your 3 tables to the instructor.