Working with Users, Groups & File Permissions

- Users
  - useradd [options] <username>
    - -m : make (create) home dir with skeleton files (/etc/skel). If you forget the -m, it is best to delete the user and start over.
    - -c : full name – originally comment
    - -e : expiration date
    - -s : default shell
    - -d : home directory

  - userdel [options] <username>
    - – r removes user's files – best practice

  - passwd <username> : prompts you for a new password; you do not have to enter the old one

  - usermod [options] <username> : user modify
    - -l new_username old_username : rename (login name)
    - -a -G group1,group2 username: append a user to multiple groups.

- Groups
  - groupadd <groupname>
  - groupdel <groupname>
  - groupmod -n <new_name> <old_name>

  - gpasswd -a <user> <group> : add user to group (add a user to a single group)
  - gpasswd -d <user> <group> : delete user.

  - * groups : shows all groups the current user (you) belongs to
  - * groups <username> : shows all groups the user belongs to.

  - * cat /etc/group : shows all groups and which user belong to each group

- File Ownership (change owner)
  - chown <user> <file>   : file ownership
  - chown <user>:<group> <file> : file and group ownership
  - chown :<group> <file>   : group ownership
  - chgrp <group> <file>   : group ownership

- File Permissions (change mode - user, group, other)
  - chmod u+x <file> : add execute
  - chmod u=rwx, g-rx, o+r <file> : set user to rwx, substrate rx from group, add read to other
  - chmod -R 755 <folder> : rwx, r-x, r-x to folders and files recursively

- File Access Control List (FACL) – allows more than one user (owner) and one primary group

- getfacl <file> : will let you know if FACL is installed and enabled.
- setfacl -m -u:<username>:rwx <filename>
- setfacl -m -g:<groupname>:rwx <filename>