```
• • • ubuntu18 — vagrant@ubuntu-bionic: ~ — ssh • vagrant ssh — 80×24
                                                                              ] E
vagrant@ubuntu-bionic:~$ sudo useradd -m -s /bin/bash class
vagrant@ubuntu-bionic:~$
• • • ubuntu18 — class@ubuntu-bionic: ~ — ssh • vagrant ssh — 80×24
                                                                              ] [
[class@ubuntu-bionic:~$ mkdir os-concepts
[class@ubuntu-bionic:~$ mkdir ubuntu-is-the-best
class@ubuntu-bionic:~$
```

```
    ● ● □ ubuntu18 - class@ubuntu-bionic: ~/os-concepts - ssh · vagrant ssh - 80...

[class@ubuntu-bionic:~$ mkdir os-concepts
[class@ubuntu-bionic:~$ mkdir ubuntu-is-the-best
[class@ubuntu-bionic:~$ cd os-concepts/
[class@ubuntu-bionic:~/os-concepts$ touch file1.txt
[class@ubuntu-bionic:~/os-concepts$ touch file2.txt
class@ubuntu-bionic:~/os-concepts$
• O D D ubuntu18 — class@ubuntu-bionic: ~/os-concepts — ssh ◄ vagrant ssh — 80...
[class@ubuntu-bionic:~$ mkdir os-concepts
[class@ubuntu-bionic:~$ mkdir ubuntu-is-the-best
[class@ubuntu-bionic:~$ cd os-concepts/
[class@ubuntu-bionic:~/os-concepts$ touch file1.txt
[class@ubuntu-bionic:~/os-concepts$ touch file2.txt
[class@ubuntu-bionic:~/os-concepts$ ls -lla
total 8
drwxrwxr-x 2 class class 4096 Oct 7 17:51 .
drwxr-xr-x 4 class class 4096 Oct 7 17:48 ...
-rw-rw-r-- 1 class class
                           0 Oct 7 17:50 file1.txt
-rw-rw-r-- 1 class class
                            0 Oct 7 17:51 file2.txt
class@ubuntu-bionic:~/os-concepts$
```

```
• • • □ ubuntu18 — class@ubuntu-bionic: ~/ubuntu-is-the-best — ssh • vagrant ss...

[class@ubuntu-bionic:~$ mkdir os-concepts
[class@ubuntu-bionic:~$ mkdir ubuntu-is-the-best
[class@ubuntu-bionic:~$ cd os-concepts/
[class@ubuntu-bionic:~/os-concepts$ touch file1.txt
[class@ubuntu-bionic:~/os-concepts$ touch file2.txt
[class@ubuntu-bionic:~/os-concepts$ ls -lla
drwxrwxr-x 2 class class 4096 Oct 7 17:51 .
drwxr-xr-x 4 class class 4096 Oct 7 17:48 ...
-rw-rw-r-- 1 class class 0 Oct 7 17:50 file1.txt
-rw-rw-r-- 1 class class
                           0 Oct 7 17:51 file2.txt
[class@ubuntu-bionic:~/os-concepts$ cd ...
[class@ubuntu-bionic:~$ cd ubuntu-is-the-best/
[class@ubuntu-bionic:~/ubuntu-is-the-best$ touch file3.txt
[class@ubuntu-bionic:~/ubuntu-is-the-best$ touch file4.txt
[class@ubuntu-bionic:~/ubuntu-is-the-best$ ls -lla
total 8
drwxrwxr-x 2 class class 4096 Oct 7 17:53 .
drwxr-xr-x 4 class class 4096 Oct 7 17:48 ...
-rw-rw-r-- 1 class class
                           0 Oct 7 17:53 file3.txt
                           0 Oct 7 17:53_file4.txt
-rw-rw-r-- 1 class class
class@ubuntu-bionic:~/ubuntu-is-the-best$
groupadd: cannot lock /etc/group; try again later.
[class@ubuntu-bionic:~$ ls
os-concepts ubuntu-is-the-best
[class@ubuntu-bionic:~$ pwd
/home/class
[class@ubuntu-bionic:~$ sudo su -
[[sudo] password for class:
class is not in the sudoers file. This incident will be reported.
[class@ubuntu-bionic:~$ exit
loaout
[vagrant@ubuntu-bionic:~$ sudo su -
[root@ubuntu-bionic:~# usermod -aG sudo class
[root@ubuntu-bionic:~# su - class
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.
[class@ubuntu-bionic:~$ pwd
/home/class
[class@ubuntu-bionic:~$ groupadd demo
groupadd: Permission denied.
groupadd: cannot lock /etc/group; try again later.
[class@ubuntu-bionic:~$ sudo groupadd demo
[[sudo] password for class:
class@ubuntu-bionic:~$
```

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• O I ubuntu18 — class@ubuntu-bionic: ~ — ssh • vagrant ssh — 80×24

groupadd: cannot lock /etc/group; try again later.
[class@ubuntu-bionic:~$ ls
os-concepts ubuntu-is-the-best
[class@ubuntu-bionic:~$ pwd
/home/class
[class@ubuntu-bionic:~$ sudo su -
[[sudo] password for class:
class is not in the sudoers file. This incident will be reported.
[class@ubuntu-bionic:~$ exit
logout
[vagrant@ubuntu-bionic:~$ sudo su -
[root@ubuntu-bionic:~# usermod -aG sudo class
[root@ubuntu-bionic:~# su - class
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.
[class@ubuntu-bionic:~$ pwd
/home/class
[class@ubuntu-bionic:~$ groupadd demo
groupadd: Permission denied.
groupadd: cannot lock /etc/group; try again later.
[class@ubuntu-bionic:~$ sudo groupadd demo
[[sudo] password for class:
class@ubuntu-bionic:~$
💿 🧅 🗎 ubuntu18 — class@ubuntu-bionic: ~/os-concepts — ssh ∢ vagrant ssh — 80...
  chgrp staff /u
                        Change the group of /u to "staff".
  chgrp -hR staff /u Change the group of /u and subfiles to "staff".
GNU coreutils online help: <a href="http://www.gnu.org/software/coreutils/">http://www.gnu.org/software/coreutils/>
Report chgrp translation bugs to <a href="http://translationproject.org/team/">http://translationproject.org/team/</a>
Full documentation at: <a href="http://www.gnu.org/software/coreutils/chgrp">http://www.gnu.org/software/coreutils/chgrp</a>
or available locally via: info '(coreutils) chgrp invocation'
class@ubuntu-bionic:~$ sudo chgrp demo file1.txt
[sudo] password for class:
chgrp: cannot access 'file1.txt': No such file or directory
class@ubuntu-bionic:~$ cd os-concepts/
class@ubuntu-bionic:~/os-concepts$ chgrp demo file1.txt
chgrp: changing group of 'file1.txt': Operation not permitted
class@ubuntu-bionic:~/os-concepts$ sudo chgrp demo file1.txt
class@ubuntu-bionic:~/os-concepts$ ls
file1.txt file2.txt
class@ubuntu-bionic:~/os-concepts$ sudo chgrp demo file2.txt
class@ubuntu-bionic:~/os-concepts$ ls -lla
total 8
drwxrwxr-x 2 class class 4096 Oct 7 17:51 .
drwxr-xr-x 4 class class 4096 Oct
                                     7 18:21 ...
                              0 Oct 7 17:50 file1.txt
-rw-rw-r-- 1 class demo
                              0 Oct 7 17:51 file2.txt
-rw-rw-r-- 1 class demo
class@ubuntu-bionic:~/os-concepts$ \sqcap
```

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💿 🔵 📄 ubuntu18 — class@ubuntu-bionic: ~ — ssh ∢ vagrant ssh — 80×24
 -p, --password PASSWORD
                                                                                 use encrypted password for the new password
 -R, --root CHROOT_DIR
                               directory to chroot into
 -s, --shell SHELL
                               new login shell for the user account
 -u, --uid UID
                                new UID for the user account
 -U, --unlock
                                unlock the user account
 -v, --add-subuids FIRST-LAST
                               add range of subordinate uids
 -V, --del-subuids FIRST-LAST remove range of subordinate uids
 -w, --add-subgids FIRST-LAST add range of subordinate gids
 -W, --del-subgids FIRST-LAST remove range of subordinate gids
 -Z, --selinux-user SEUSER
                               new SELinux user mapping for the user account
class@ubuntu-bionic:~$ sudo usermod -a -G demo class
class@ubuntu-bionic:~$ group class
Command 'group' not found, did you mean:
  command 'groups' from deb coreutils
 command 'grop' from deb grop
Try: sudo apt install <deb name>
class@ubuntu-bionic:~$ groups class
class : class sudo demo
class@ubuntu-bionic:~$
💿 🦲 📄 ubuntu18 — class@ubuntu-bionic: ~ — ssh ∢ vagrant ssh — 80×24
                                                                                 /home/class/os-concepts/crash.in
/home/class/crash.in
find: '/home/ubuntu/.ssh': Permission denied
find: '/home/vagrant/.ssh': Permission denied
find: '/home/vagrant/.local/share': Permission denied
find: '/home/vagrant/.cache': Permission denied
find: '/home/vagrant/.gnupg': Permission denied
class@ubuntu-bionic:~$ find . -name crash.in
./os-concepts/crash.in
./crash.in
class@ubuntu-bionic:~$ pwd
/home/class
class@ubuntu-bionic:~$ find /home -name crash
find: '/home/new/.local/share': Permission denied
find: '/home/ubuntu/.ssh': Permission denied
find: '/home/vagrant/.ssh': Permission denied
find: '/home/vagrant/.local/share': Permission denied
find: '/home/vagrant/.cache': Permission denied
find: '/home/vagrant/.gnupg': Permission denied
class@ubuntu-bionic:~$ find /home/class -name crash
class@ubuntu-bionic:~$ find /home/class -name crash.*
/home/class/os-concepts/crash.in
/home/class/crash.in
class@ubuntu-bionic:~$
```

```
find: '/home/new/.local/share': Permission denied
find: '/home/ubuntu/.ssh': Permission denied
find: '/home/vagrant/.ssh': Permission denied
find: '/home/vagrant/.local/share': Permission denied
find: '/home/vagrant/.cache': Permission denied
find: '/home/vagrant/.gnupg': Permission denied
class@ubuntu-bionic:~$ find /home/class -name crash
class@ubuntu-bionic:~$ find /home/class -name crash.*
/home/class/os-concepts/crash.in
/home/class/crash.in
class@ubuntu-bionic:~$ find /home/class -name crash.in | xargs sed 's/crash/brok]
en/g'
Welcome to the broken course. You will learn all the new and best topics here. C
ongratulation for joining this broken course. broken your goals.
Welcome to the broken course. You will learn all the new and best topics here. C
ongratulation for joining this broken course. broken your goals.
class@ubuntu-bionic:~$ find /home/class -name crash.in | xargs sed -i 's/crash/bl
roken/g'
class@ubuntu-bionic:~$ ls
crash.in os-concepts ubuntu-is-the-best
class@ubuntu-bionic:~$ cat crash.in
Welcome to the broken course. You will learn all the new and best topics here. C
ongratulation for joining this broken course. broken your goals.
class@ubuntu-bionic:~$
```