

```
Last login: Wed Feb 13 14:37:17 on ttys000
Shefali-Emmanuel-MacBook-Pro-2018:~ shefaliemmanuel$ ssh -i .desktop/emmanuel.pem ubuntu@172.17.64.250
Warning: Identity file .desktop/emmanuel.pem not accessible: No such file or directory.
The authenticity of host '172.17.64.250 (172.17.64.250)' can't be established.
ECDSA key fingerprint is SHA256:Wp9wOL1jJMaafVcP3IFvY8cmC/2uL8+BGf4unY28.
Are you sure you want to continue connecting (yes/no)? yes
Warning: Permanently added '172.17.64.250' (ECDSA) to the list of known hosts.
ubuntu@172.17.64.250: Permission denied (publickey).
Shefali-Emmanuel-MacBook-Pro-2018:~ shefaliemmanuel$ chmod 400 emmanuel.pem
chmod: emmanuel.pem: No such file or directory
Shefali-Emmanuel-MacBook-Pro-2018:~ shefaliemmanuel$ chmod 400 emmanuel.pem
chmod: emmanuel.pem: No such file or directory
Shefali-Emmanuel-MacBook-Pro-2018:~ shefaliemmanuel$ ls -la
total 39488
drwxr-xr-x+ 77 shefaliemmanuel staff 2464 Feb 10 09:53 .
drwxr-xr-x  8 root admin 256 Sep 25 23:23 ..
-r-----  1 shefaliemmanuel staff  7 Apr 14 2017 .CFUserTextEncoding
-rw-r--r--@  1 shefaliemmanuel staff 28676 Feb 13 14:54 .DS_Store
drwx-----  2 shefaliemmanuel staff  64 Feb 13 14:30 .Trash
drwxr-xr-x  6 shefaliemmanuel staff 192 Sep  4 2017 .android
drwxr-xr-x 16 shefaliemmanuel staff  512 Jun 21 2017 .atom
-rw-r--r--  1 shefaliemmanuel staff 15253 Jun 14 2018 .babel.json
-rw-r--r--  1 shefaliemmanuel staff 19736 Feb 13 14:37 .bash_history
-rw-r--r--  1 shefaliemmanuel staff  840 May  9 2018 .bash_profile
-rw-r--r--  1 shefaliemmanuel staff  672 Aug 30 2016 .bash_profile.pysave
drwx----- 26 shefaliemmanuel staff  832 Feb 13 14:57 .bash_sessions
drwxr-xr-x  3 shefaliemmanuel staff  96 Aug 10 2016 .config
drwxr-xr-x  3 shefaliemmanuel staff  96 May 21 2018 .configprops
drwx-----  3 shefaliemmanuel staff  96 May  3 2016 .cups
drwxr-xr-x  3 shefaliemmanuel staff  96 May 21 2018 .datastorage
drwxr-xr-x 12 shefaliemmanuel staff  384 Jul  6 2018 .eclipse
drwxr-xr-x  4 shefaliemmanuel staff  128 Feb 27 2017 .electron
drwxr-xr-x  4 shefaliemmanuel staff  128 Aug 30 2016 .gem
drwxr-xr-x 16 shefaliemmanuel staff  512 Nov 19 17:53 .git
-rw-r--r--  1 shefaliemmanuel staff  188 Apr 26 2018 .gitconfig
drwxr-xr-x  6 shefaliemmanuel staff  192 Sep  4 2017 .gradle
drwxr-xr-x  9 shefaliemmanuel staff  288 Aug 15 21:08 .idea
drwxr-xr-x  5 shefaliemmanuel staff  160 Aug 30 2016 .idlerc
drwxr-xr-x  3 shefaliemmanuel staff  96 Aug 10 2016 .m2
drwxr-xr-x  3 shefaliemmanuel staff  96 Feb 27 2017 .node-gyp
-rw-----  1 shefaliemmanuel staff  20 Feb 27 2017 .node_repl_history
drwxr-xr-x 827 shefaliemmanuel staff 26464 Jun 14 2018 .npm
drwxr-xr-x  8 shefaliemmanuel staff  256 Sep 25 2017 .oracle_jre_usage
drwxr-xr-x  8 shefaliemmanuel staff  256 Apr 26 2018 .p2
drwx-----  5 shefaliemmanuel staff  160 Aug 10 2016 .ssh
drwxr-xr-x  4 shefaliemmanuel staff  128 Oct  9 20:26 .swipl-dir-history
drwxr-xr-x  3 shefaliemmanuel staff  96 Feb 10 2017 .tooling
-rw-r--r--  1 shefaliemmanuel staff  9468 Jun 14 2018 .v8flags.5.1.281.89.31a788c88c54abfa21dc1316862df6b0.json
-rw-----  1 shefaliemmanuel staff 11805 Jun 14 2018 .viminfo
drwxr-xr-x  3 shefaliemmanuel staff  96 Nov 18 20:18 .vscode
-rw-r--r--  1 shefaliemmanuel staff 14254 Jun 14 2018 A-BProblem.zip
drwx-----@  5 shefaliemmanuel staff  160 May 24 2018 Applications
drwx-----@  5 shefaliemmanuel staff  160 May 24 2018 Applications (Parallels)
-rw-r--r--  1 shefaliemmanuel staff 153576 Jun 14 2018 Assignment1.zip
-rw-r--r--  1 shefaliemmanuel staff  4537 Jun 14 2018 Assignment1Example.zip
-rw-r--r--  1 shefaliemmanuel staff 174983 Jun 14 2018 Assignment2Emmanuel.zip
-rw-r--r--  1 shefaliemmanuel staff 8889361 Jun 14 2018 Assignment3.zip
-rw-r--r--  1 shefaliemmanuel staff 9081453 Jun 14 2018 ASCII 221 Assignment 3.zip
-rw-r--r--  1 shefaliemmanuel staff  4079 Jun 14 2018 Class1.zip
-rw-r--r--  1 shefaliemmanuel staff  3254 Jun 14 2018 Class10.zip
-rw-r--r--  1 shefaliemmanuel staff  5378 Jun 14 2018 Class2.zip
-rw-r--r--  1 shefaliemmanuel staff  8196 Jun 14 2018 Class3.zip
-rw-r--r--  1 shefaliemmanuel staff  2753 Jun 14 2018 Class4.zip
-rw-r--r--  1 shefaliemmanuel staff  1082 Jun 14 2018 Class5.zip
-rw-r--r--  1 shefaliemmanuel staff  5817 Jun 14 2018 Class6.zip
-rw-r--r--  1 shefaliemmanuel staff  7102 Jun 14 2018 Class7.zip
-rw-r--r--  1 shefaliemmanuel staff  7039 Jun 14 2018 Class8.zip
-rw-r--r--  1 shefaliemmanuel staff  8934 Jun 14 2018 Class9.zip
drwxrwxr-x@  3 shefaliemmanuel staff  96 May  9 2018 Creative Cloud Files
drwx-----@ 23 shefaliemmanuel staff  736 May 24 2018 Desktop
drwx-----@ 18 shefaliemmanuel staff  576 May 24 2018 Documents
drwx-----+ 22 shefaliemmanuel staff  704 Feb 13 14:54 Downloads
lrwx-----  1 shefaliemmanuel staff  20 Feb 10 09:53 Google Drive File Stream -> /Volumes/GoogleDrive
-rw-r--r--  1 shefaliemmanuel staff 2687 Jun 14 2018 ImageProcessing.java
drwxr-xr-x  3 shefaliemmanuel staff  96 May 21 2018 JustinMind
-rw-r--r--  1 shefaliemmanuel staff 5399 Jun 14 2018 LastClass.zip
drwx-----@ 79 shefaliemmanuel staff 2528 Nov 18 05:35 Library
drwx-----+  8 shefaliemmanuel staff  256 Jan 22 23:59 Movies
drwx-----+  9 shefaliemmanuel staff  288 Dec 22 07:06 Music
drwx-----  4 shefaliemmanuel staff  128 May 24 2018 Parallels
drwx-----+  8 shefaliemmanuel staff  256 Jan 22 23:57 Pictures
drwxr-xr-x+  5 shefaliemmanuel staff  160 Apr 27 2016 Public
drwxr-xr-x+  3 shefaliemmanuel staff  96 May 24 2018 Sites
-rw-r--r--  1 shefaliemmanuel staff  8490 Jun 14 2018 Test2 Example.zip
drwxr-xr-x 20 shefaliemmanuel staff  640 Apr 26 2018 Topsoil
-rw-r--r--  1 shefaliemmanuel staff  69748 Jun 14 2018 ValidOrInvalid.zip
drwxr-xr-x 15 shefaliemmanuel staff  408 Sep 22 23:22 eclipse-workspace
-rw-r--r--  1 shefaliemmanuel staff 1642329 May  9 2018 get-plp.py
drwxr-xr-x 16 shefaliemmanuel staff  512 Apr 16 2018 homebrew
drwxr-xr-x  3 shefaliemmanuel staff  96 Jul  6 2018 src
-rw-r--r--  1 shefaliemmanuel staff  425 Jul  6 2018 untitled104.iml
Shefali-Emmanuel-MacBook-Pro-2018:~ shefaliemmanuel$ ssh -i Desktop/emmanuel.pem ubuntu@172.17.64.250
#####
@ WARNING: UNPROTECTED PRIVATE KEY FILE! @
#####
Permissions 0644 for 'Desktop/emmanuel.pem' are too open.
It is required that your private key files are NOT accessible by others.
This private key will be ignored.
Load key "Desktop/emmanuel.pem": bad permissions
ubuntu@172.17.64.250: Permission denied (publickey).
Shefali-Emmanuel-MacBook-Pro-2018:~ shefaliemmanuel$ chmod 400 Desktop/emmanuel.pem
Shefali-Emmanuel-MacBook-Pro-2018:~ shefaliemmanuel$ ssh -i Desktop/emmanuel.pem ubuntu@172.17.64.250
Welcome to Ubuntu 18.04 LTS (GNU/Linux 4.15.0-22-generic x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/advantage

System information as of Wed Feb 13 12:59:36 UTC 2019

System load:  0.0          Processes:      81
Usage of /:   4.9% of 19.21GB Users logged in:  0
Memory usage: 6%          IP address for ens3: 172.17.64.250
Swap usage:   0%

Get cloud support with Ubuntu Advantage Cloud Guest:
http://www.ubuntu.com/business/services/cloud

0 packages can be updated.
0 updates are security updates.

The programs included with the Ubuntu system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.

To run a command as administrator (user "root"), use "sudo <command>".
```

See "man sudo\_root" for details.

```
ubuntu@emmanuel1:~$ sudo passwd ubuntu
Enter new UNIX password:
Retype new UNIX password:
passwd: password updated successfully
ubuntu@emmanuel1:~$ lsblk
NAME        MAJ:MIN RM  SIZE RO TYPE MOUNTPOINT
vda         252:0    0   20G  0 disk
├─vda1      252:1    0  19.9G  0 part /
├─vda14     252:14   0    4M  0 part
├─vda15     252:15   0  106M  0 part /boot/efi
└─vdb       252:16   0     2G  0 disk
ubuntu@emmanuel1:~$ sudo fdisk /dev/vdb
```

```
Welcome to fdisk (util-linux 2.31.1).
Changes will remain in memory only, until you decide to write them.
Be careful before using the write command.
```

```
Device does not contain a recognized partition table.
Created a new DOS disklabel with disk identifier 0x4ec5f74f.
```

```
Command (m for help): n
Partition type
  p   primary (0 primary, 0 extended, 4 free)
  e   extended (container for logical partitions)
Select (default p): p
Partition number (1-4, default 1): 1
First sector (2048-4194303, default 2048):
Last sector, +sectors or +size{K,M,G,T,P} (2048-4194303, default 4194303): t
Last sector, +sectors or +size{K,M,G,T,P} (2048-4194303, default 4194303): 83
Value out of range.
Last sector, +sectors or +size{K,M,G,T,P} (2048-4194303, default 4194303): T
Last sector, +sectors or +size{K,M,G,T,P} (2048-4194303, default 4194303): 83
Value out of range.
Last sector, +sectors or +size{K,M,G,T,P} (2048-4194303, default 4194303):
```

```
Created a new partition 1 of type 'Linux' and of size 2 GiB.
```

```
Command (m for help): n
All space for primary partitions is in use.
```

```
Command (m for help): t
Selected partition 1
Hex code (type L to list all codes): 83
Changed type of partition 'Linux' to 'Linux'.
```

```
Command (m for help): w
The partition table has been altered.
Calling ioctl() to re-read partition table.
Syncing disks.
```

```
ubuntu@emmanuel1:~$ lsblk
```

```
Command 'lsblk' not found, did you mean:
```

```
command 'lsblk' from deb util-linux
```

```
Try: sudo apt install <deb name>
```

```
ubuntu@emmanuel1:~$ lsblk
NAME        MAJ:MIN RM  SIZE RO TYPE MOUNTPOINT
vda         252:0    0   20G  0 disk
├─vda1      252:1    0  19.9G  0 part /
├─vda14     252:14   0    4M  0 part
├─vda15     252:15   0  106M  0 part /boot/efi
└─vdb       252:16   0     2G  0 disk
├─vdb1      252:17   0     2G  0 part
ubuntu@emmanuel1:~$ sudo mkdir /data
ubuntu@emmanuel1:~$ sudo mkfs.ext4 /dev/vdb1
mke2fs 1.44.1 (24-Mar-2018)
Creating filesystem with 524032 4k blocks and 131072 inodes
Filesystem UUID: 22714f26-b8b9-4850-aa5a-8bfdelale715
Superblock backups stored on blocks:
    32768, 98304, 163840, 229376, 294912
```

```
Allocating group tables: done
Writing inode tables: done
Creating journal (8192 blocks): done
Writing superblocks and filesystem accounting information: done
```

```
ubuntu@emmanuel1:~$ sudo mount -t ext4 /dev/vdb1 /data
```

```
ubuntu@emmanuel1:~$ lsblk
NAME        MAJ:MIN RM  SIZE RO TYPE MOUNTPOINT
vda         252:0    0   20G  0 disk
├─vda1      252:1    0  19.9G  0 part /
├─vda14     252:14   0    4M  0 part
├─vda15     252:15   0  106M  0 part /boot/efi
└─vdb       252:16   0     2G  0 disk
├─vdb1      252:17   0     2G  0 part /data
ubuntu@emmanuel1:~$ sudo nano /data/myfile.txt
ubuntu@emmanuel1:~$ lsblk
NAME        MAJ:MIN RM  SIZE RO TYPE MOUNTPOINT
vda         252:0    0   20G  0 disk
├─vda1      252:1    0  19.9G  0 part /
├─vda14     252:14   0    4M  0 part
├─vda15     252:15   0  106M  0 part /boot/efi
└─vdb       252:16   0     2G  0 disk
├─vdb1      252:17   0     2G  0 part /data
ubuntu@emmanuel1:~$
```