```
Last login: Wed Feb 27 11:16:02 on console
Shefali-Emmanuels-MacBook-Pro-2018:~ shefaliemmanuel$ ssh -i .desktop/emmanuel.pem ubuntu@172.17.64.239
Warning: Identity file .desktop/emmanuel.pem not accessible: No such file or directory.
The authenticity of host '172.17.64.239 (172.17.64.239)' can't be established.
ECDSA key fingerprint is SHA256:25EuCgoUxyFnbINM3r9fLa3c7KXxOYt6csN+rrDKQqc.
Are you sure you want to continue connecting (yes/no)? yes
Warning: Permanently added '172.17.64.239' (ECDSA) to the list of known hosts.
ubuntu@172.17.64.239: Permission denied (publickey).
Shefali-Emmanuels-MacBook-Pro-2018:~ shefaliemmanuel$ chmod 400 emmanuel.pem
chmod: emmanuel.pem: No such file or directory
Shefali-Emmanuels-MacBook-Pro-2018:~ shefaliemmanuel$ chmod 400 .desktop/emmanuel.pem
chmod: .desktop/emmanuel.pem: No such file or directory
Shefali-Emmanuels-MacBook-Pro-2018:~ shefaliemmanuel$ chmod 400 .desktop/ emmanuel.pem
chmod: .desktop/: No such file or directory
chmod: emmanuel.pem: No such file or directory
Shefali-Emmanuels-MacBook-Pro-2018:~ shefaliemmanuel$ chmod 400 Desktop/ emmanuel.pem
chmod: emmanuel.pem: No such file or directory
Shefali-Emmanuels-MacBook-Pro-2018:~ shefaliemmanuel$ ssh -i Desktop/emmanuel.pem ubuntu@172.17.64.239
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 27 12:02:04 UTC 2019

  System load:  0.36              Processes:            87
  Usage of /:   12.8% of 9.52GB   Users logged in:      0
  Memory usage: 12%               IP address for ens3: 172.17.64.239
  Swap usage:   0%

 * 'snap info' now shows the freshness of each channel.
   Try 'snap info microk8s' for all the latest goodness.


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

198 packages can be updated.
95 updates are security updates.


Last login: Wed Feb 20 12:52:55 2019
ubuntu@shefaliemmanuel:~$ sudo passwd ubuntu
Enter new UNIX password:
Retype new UNIX password:
passwd: password updated successfully
ubuntu@shefaliemmanuel:~$ sudo apt update
Get:1 http://security.ubuntu.com/ubuntu bionic-security InRelease [88.7 kB]
Hit:2 http://nova.clouds.archive.ubuntu.com/ubuntu bionic InRelease
Hit:3 http://nova.clouds.archive.ubuntu.com/ubuntu bionic-updates InRelease
Hit:4 http://nova.clouds.archive.ubuntu.com/ubuntu bionic-backports InRelease
Get:5 http://security.ubuntu.com/ubuntu bionic-security/main Sources [76.4 kB]
Get:6 http://security.ubuntu.com/ubuntu bionic-security/main amd64 Packages [270 kB]
Fetched 435 kB in 2s (279 kB/s)
Reading package lists... Done
Building dependency tree
Reading state information... Done
192 packages can be upgraded. Run 'apt list --upgradable' to see them.
ubuntu@shefaliemmanuel:~$ apache2 php libapache2-mod-php
Usage: apache2 [-D name] [-d directory] [-f file]
               [-C "directive"] [-c "directive"]
               [-k start|restart|graceful|graceful-stop|stop]
               [-v] [-V] [-h] [-l] [-L] [-t] [-T] [-S] [-X]
Options:
  -D name            : define a name for use in <IfDefine name> directives
  -d directory       : specify an alternate initial ServerRoot
  -f file            : specify an alternate ServerConfigFile
  -C "directive"     : process directive before reading config files
  -c "directive"     : process directive after reading config files
  -e level           : show startup errors of level (see LogLevel)
  -E file            : log startup errors to file
  -v                 : show version number
  -V                 : show compile settings
  -h                 : list available command line options (this page)
  -l                 : list compiled in modules
  -L                 : list available configuration directives
  -t -D DUMP_VHOSTS  : show parsed vhost settings
  -t -D DUMP_RUN_CFG : show parsed run settings
  -S                 : a synonym for -t -D DUMP_VHOSTS -D DUMP_RUN_CFG
  -t -D DUMP_MODULES : show all loaded modules
  -M                 : a synonym for -t -D DUMP_MODULES
  -t -D DUMP_INCLUDES: show all included configuration files
  -t                 : run syntax check for config files
  -T                 : start without DocumentRoot(s) check
  -X                 : debug mode (only one worker, do not detach)
ubuntu@shefaliemmanuel:~$ sudo service apache2 restart
ubuntu@shefaliemmanuel:~$ /var/www/html/index.html
-bash: /var/www/html/index.html: Permission denied
ubuntu@shefaliemmanuel:~$ ls
index.html
ubuntu@shefaliemmanuel:~$ delete /var/www/html/index.html
delete: command not found
ubuntu@shefaliemmanuel:~$ ls
index.html
ubuntu@shefaliemmanuel:~$ /var/www/html/index.html -f
-bash: /var/www/html/index.html: Permission denied
ubuntu@shefaliemmanuel:~$ rm /var/www/html/index.html
rm: remove write-protected regular file '/var/www/html/index.html'? yes
rm: cannot remove '/var/www/html/index.html': Permission denied
ubuntu@shefaliemmanuel:~$ sudo rm /var/www/html/index.html
ubuntu@shefaliemmanuel:~$ ls
index.html
ubuntu@shefaliemmanuel:~$ pwd
/home/ubuntu
ubuntu@shefaliemmanuel:~$ wget http://math.ut.ee/~jakovits/index.zip
--2019-02-27 12:09:19--  http://math.ut.ee/~jakovits/index.zip
Resolving math.ut.ee (math.ut.ee)... 193.40.37.95
Connecting to math.ut.ee (math.ut.ee)|193.40.37.95|:80... connected.
HTTP request sent, awaiting response... 302 Found
Location: http://kodu.ut.ee/~jakovits/index.zip [following]
--2019-02-27 12:09:19--  http://kodu.ut.ee/~jakovits/index.zip
Resolving kodu.ut.ee (kodu.ut.ee)... 193.40.5.127, 2001:bb8:2002:500:250:56ff:feb4:0
Connecting to kodu.ut.ee (kodu.ut.ee)|193.40.5.127|:80... connected.
HTTP request sent, awaiting response... 200 OK
Length: 1135 (1.1K) [application/zip]
Saving to: 'index.zip'

index.zip                    100%[===================================================================================================>]   1.11K  --.-KB/s    in 0s

2019-02-27 12:09:19 (123 MB/s) - 'index.zip' saved [1135/1135]

ubuntu@shefaliemmanuel:~$ unzip

Command 'unzip' not found, but can be installed with:

sudo apt install unzip

ubuntu@shefaliemmanuel:~$ sudo apt install unzip
Reading package lists... Done
Building dependency tree
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Reading state information... Done
The following package was automatically installed and is no longer required:
  grub-pc-bin
Use 'sudo apt autoremove' to remove it.
Suggested packages:
  zip
The following NEW packages will be installed:
  unzip
0 upgraded, 1 newly installed, 0 to remove and 192 not upgraded.
Need to get 167 kB of archives.
After this operation, 558 kB of additional disk space will be used.
Get:1 http://nova.clouds.archive.ubuntu.com/ubuntu bionic/main amd64 unzip amd64 6.0-21ubuntu1 [167 kB]
Fetched 167 kB in 0s (404 kB/s)
Selecting previously unselected package unzip.
(Reading database ... 60645 files and directories currently installed.)
Preparing to unpack .../unzip_6.0-21ubuntu1_amd64.deb ...
Unpacking unzip (6.0-21ubuntu1) ...
Processing triggers for mime-support (3.60ubuntu1) ...
Setting up unzip (6.0-21ubuntu1) ...
Processing triggers for man-db (2.8.3-2) ...
ubuntu@shefaliemmanuel:~$ /var/www/html/data.txt
-bash: /var/www/html/data.txt: No such file or directory
ubuntu@shefaliemmanuel:~$ touch /var/www/html/data.txt
touch: cannot touch '/var/www/html/data.txt': Permission denied
ubuntu@shefaliemmanuel:~$ sudo touch /var/www/html/data.txt
ubuntu@shefaliemmanuel:~$ ls
index.html  index.zip
ubuntu@shefaliemmanuel:~$ pmd

Command 'pmd' not found, but there are 22 similar ones.

ubuntu@shefaliemmanuel:~$ pwd
/home/ubuntu
ubuntu@shefaliemmanuel:~$ ls
index.html  index.zip
ubuntu@shefaliemmanuel:~$ sudo chown www-data /var/www/html/data.txt
ubuntu@shefaliemmanuel:~$ /var/www/html/index.php
-bash: /var/www/html/index.php: No such file or directory
ubuntu@shefaliemmanuel:~$ unzip index.zip
Archive:  index.zip
  inflating: index.php
ubuntu@shefaliemmanuel:~$ /var/www/html/index.php
-bash: /var/www/html/index.php: No such file or directory
ubuntu@shefaliemmanuel:~$ ls
index.html  index.php  index.zip
ubuntu@shefaliemmanuel:~$ sudo nano /var/www/html/index.php
ubuntu@shefaliemmanuel:~$ sudo nano /var/www/html/index.php
ubuntu@shefaliemmanuel:~$ sudo cp index.php  /var/www/html/index.php
ubuntu@shefaliemmanuel:~$ sudo nano /var/www/html/index.php
ubuntu@shefaliemmanuel:~$ sudo nano /var/www/html/index.php
ubuntu@shefaliemmanuel:~$ sudo nano /var/www/html/index.php
ubuntu@shefaliemmanuel:~$ sudo nano /var/www/html/index.php
ubuntu@shefaliemmanuel:~$ sudo apt install apache2 php libapache2-mod-php
Reading package lists... Done
Building dependency tree
Reading state information... Done
apache2 is already the newest version (2.4.29-1ubuntu4.5).
The following package was automatically installed and is no longer required:
  grub-pc-bin
Use 'sudo apt autoremove' to remove it.
The following additional packages will be installed:
  libapache2-mod-php7.2 libsodium23 php-common php7.2 php7.2-cli php7.2-common php7.2-json php7.2-opcache php7.2-readline
Suggested packages:
  php-pear
The following NEW packages will be installed:
  libapache2-mod-php libapache2-mod-php7.2 libsodium23 php php-common php7.2 php7.2-cli php7.2-common php7.2-json php7.2-opcache php7.2-readline
0 upgraded, 11 newly installed, 0 to remove and 192 not upgraded.
Need to get 4009 kB of archives.
After this operation, 17.5 MB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://nova.clouds.archive.ubuntu.com/ubuntu bionic/main amd64 php-common all 1:60ubuntu1 [12.1 kB]
Get:2 http://nova.clouds.archive.ubuntu.com/ubuntu bionic-updates/main amd64 php7.2-common amd64 7.2.15-0ubuntu0.18.04.1 [882 kB]
Get:3 http://nova.clouds.archive.ubuntu.com/ubuntu bionic-updates/main amd64 php7.2-json amd64 7.2.15-0ubuntu0.18.04.1 [18.8 kB]
Get:4 http://nova.clouds.archive.ubuntu.com/ubuntu bionic-updates/main amd64 php7.2-opcache amd64 7.2.15-0ubuntu0.18.04.1 [165 kB]
Get:5 http://nova.clouds.archive.ubuntu.com/ubuntu bionic-updates/main amd64 php7.2-readline amd64 7.2.15-0ubuntu0.18.04.1 [12.1 kB]
Get:6 http://nova.clouds.archive.ubuntu.com/ubuntu bionic/main amd64 libsodium23 amd64 1.0.16-2 [143 kB]
Get:7 http://nova.clouds.archive.ubuntu.com/ubuntu bionic-updates/main amd64 php7.2-cli amd64 7.2.15-0ubuntu0.18.04.1 [1409 kB]
Get:8 http://nova.clouds.archive.ubuntu.com/ubuntu bionic-updates/main amd64 libapache2-mod-php7.2 amd64 7.2.15-0ubuntu0.18.04.1 [1351 kB]
Get:9 http://nova.clouds.archive.ubuntu.com/ubuntu bionic/main amd64 libapache2-mod-php all 1:7.2+60ubuntu1 [3212 B]
Get:10 http://nova.clouds.archive.ubuntu.com/ubuntu bionic-updates/main amd64 php7.2 all 7.2.15-0ubuntu0.18.04.1 [9244 B]
Get:11 http://nova.clouds.archive.ubuntu.com/ubuntu bionic/main amd64 php all 1:7.2+60ubuntu1 [3084 B]
Fetched 4009 kB in 1s (3722 kB/s)
Selecting previously unselected package php-common.
(Reading database ... 60663 files and directories currently installed.)
Preparing to unpack .../00-php-common_1%3a60ubuntu1_all.deb ...
Unpacking php-common (1:60ubuntu1) ...
Selecting previously unselected package php7.2-common.
Preparing to unpack .../01-php7.2-common_7.2.15-0ubuntu0.18.04.1_amd64.deb ...
Unpacking php7.2-common (7.2.15-0ubuntu0.18.04.1) ...
Selecting previously unselected package php7.2-json.
Preparing to unpack .../02-php7.2-json_7.2.15-0ubuntu0.18.04.1_amd64.deb ...
Unpacking php7.2-json (7.2.15-0ubuntu0.18.04.1) ...
Selecting previously unselected package php7.2-opcache.
Preparing to unpack .../03-php7.2-opcache_7.2.15-0ubuntu0.18.04.1_amd64.deb ...
Unpacking php7.2-opcache (7.2.15-0ubuntu0.18.04.1) ...
Selecting previously unselected package php7.2-readline.
Preparing to unpack .../04-php7.2-readline_7.2.15-0ubuntu0.18.04.1_amd64.deb ...
Unpacking php7.2-readline (7.2.15-0ubuntu0.18.04.1) ...
Selecting previously unselected package libsodium23:amd64.
Preparing to unpack .../05-libsodium23_1.0.16-2_amd64.deb ...
Unpacking libsodium23:amd64 (1.0.16-2) ...
Selecting previously unselected package php7.2-cli.
Preparing to unpack .../06-php7.2-cli_7.2.15-0ubuntu0.18.04.1_amd64.deb ...
Unpacking php7.2-cli (7.2.15-0ubuntu0.18.04.1) ...
Selecting previously unselected package libapache2-mod-php7.2.
Preparing to unpack .../07-libapache2-mod-php7.2_7.2.15-0ubuntu0.18.04.1_amd64.deb ...
Unpacking libapache2-mod-php7.2 (7.2.15-0ubuntu0.18.04.1) ...
Selecting previously unselected package libapache2-mod-php.
Preparing to unpack .../08-libapache2-mod-php_1%3a7.2+60ubuntu1_all.deb ...
Unpacking libapache2-mod-php (1:7.2+60ubuntu1) ...
Selecting previously unselected package php7.2.
Preparing to unpack .../09-php7.2_7.2.15-0ubuntu0.18.04.1_all.deb ...
Unpacking php7.2 (7.2.15-0ubuntu0.18.04.1) ...
Selecting previously unselected package php.
Preparing to unpack .../10-php_1%3a7.2+60ubuntu1_all.deb ...
Unpacking php (1:7.2+60ubuntu1) ...
Setting up libsodium23:amd64 (1.0.16-2) ...
Processing triggers for libc-bin (2.27-3ubuntu1) ...
Setting up php-common (1:60ubuntu1) ...
Created symlink /etc/systemd/system/timers.target.wants/phpsessionclean.timer → /lib/systemd/system/phpsessionclean.timer.
Processing triggers for man-db (2.8.3-2) ...
Setting up php7.2-common (7.2.15-0ubuntu0.18.04.1) ...

Creating config file /etc/php/7.2/mods-available/calendar.ini with new version

Creating config file /etc/php/7.2/mods-available/ctype.ini with new version

Creating config file /etc/php/7.2/mods-available/exif.ini with new version

Creating config file /etc/php/7.2/mods-available/fileinfo.ini with new version
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Creating config file /etc/php/7.2/mods-available/ftp.ini with new version

Creating config file /etc/php/7.2/mods-available/gettext.ini with new version

Creating config file /etc/php/7.2/mods-available/iconv.ini with new version

Creating config file /etc/php/7.2/mods-available/pdo.ini with new version

Creating config file /etc/php/7.2/mods-available/phar.ini with new version

Creating config file /etc/php/7.2/mods-available/posix.ini with new version

Creating config file /etc/php/7.2/mods-available/shmop.ini with new version

Creating config file /etc/php/7.2/mods-available/sockets.ini with new version

Creating config file /etc/php/7.2/mods-available/sysvmsg.ini with new version

Creating config file /etc/php/7.2/mods-available/sysvsem.ini with new version

Creating config file /etc/php/7.2/mods-available/sysvshm.ini with new version

Creating config file /etc/php/7.2/mods-available/tokenizer.ini with new version
Setting up php7.2-readline (7.2.15-0ubuntu0.18.04.1) ...

Creating config file /etc/php/7.2/mods-available/readline.ini with new version
Setting up php7.2-json (7.2.15-0ubuntu0.18.04.1) ...

Creating config file /etc/php/7.2/mods-available/json.ini with new version
Setting up php7.2-opcache (7.2.15-0ubuntu0.18.04.1) ...

Creating config file /etc/php/7.2/mods-available/opcache.ini with new version
Setting up php7.2-cli (7.2.15-0ubuntu0.18.04.1) ...
update-alternatives: using /usr/bin/php7.2 to provide /usr/bin/php (php) in auto mode
update-alternatives: using /usr/bin/phar7.2 to provide /usr/bin/phar (phar) in auto mode
update-alternatives: using /usr/bin/phar.phar7.2 to provide /usr/bin/phar.phar (phar.phar) in auto mode

Creating config file /etc/php/7.2/cli/php.ini with new version
Setting up libapache2-mod-php7.2 (7.2.15-0ubuntu0.18.04.1) ...

Creating config file /etc/php/7.2/apache2/php.ini with new version
Module mpm_event disabled.
Enabling module mpm_prefork.
apache2_switch_mpm Switch to prefork
apache2_invoke: Enable module php7.2
Setting up libapache2-mod-php (1:7.2+60ubuntu1) ...
Setting up php7.2 (7.2.15-0ubuntu0.18.04.1) ...
Setting up php (1:7.2+60ubuntu1) ...
ubuntu@shefaliemmanuel:~$ netstat | grep http
tcp6       0       0 shefaliemmanuel:http    172.17.64.246:41404      TIME_WAIT
tcp6       0       0 shefaliemmanuel:http    172.17.64.246:41402      TIME_WAIT
tcp6       0       0 shefaliemmanuel:http    172.17.64.246:41410      TIME_WAIT
tcp6       0       0 shefaliemmanuel:http    172.17.64.246:41398      TIME_WAIT
tcp6       0       0 shefaliemmanuel:http    172.17.64.246:41406      TIME_WAIT
tcp6       0       0 shefaliemmanuel:http    172.17.64.246:41400      TIME_WAIT
tcp6       0       0 shefaliemmanuel:http    172.17.64.246:41408      TIME_WAIT
ubuntu@shefaliemmanuel:~$
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