

**BY : Raghav Rastogi**

## **Installing MySQL on Ubuntu 20.04**

```
sudo apt update
```

```
(update package index)
```

```
sudo apt install mysql-server
```

```
sudo mysql_secure_installation
```

```
(setting password level as 2)
```

creating user in MySQL

```
sudo mysql
```

(to enter the mysql prompt )

```
CREATE USER 'raghavo9'@'localhost' IDENTIFIED BY  
'Raghav@1234';
```

GRANTING PRIVILAGES TO THE USER

```
GRANT CREATE , ALTER, DROP , INSERT , UPDATE , DELETE,  
SELECT , REFERENCES , RELOAD ON *.* TO  
'raghavo9'@'localhost' WITH GRANT OPTION;
```

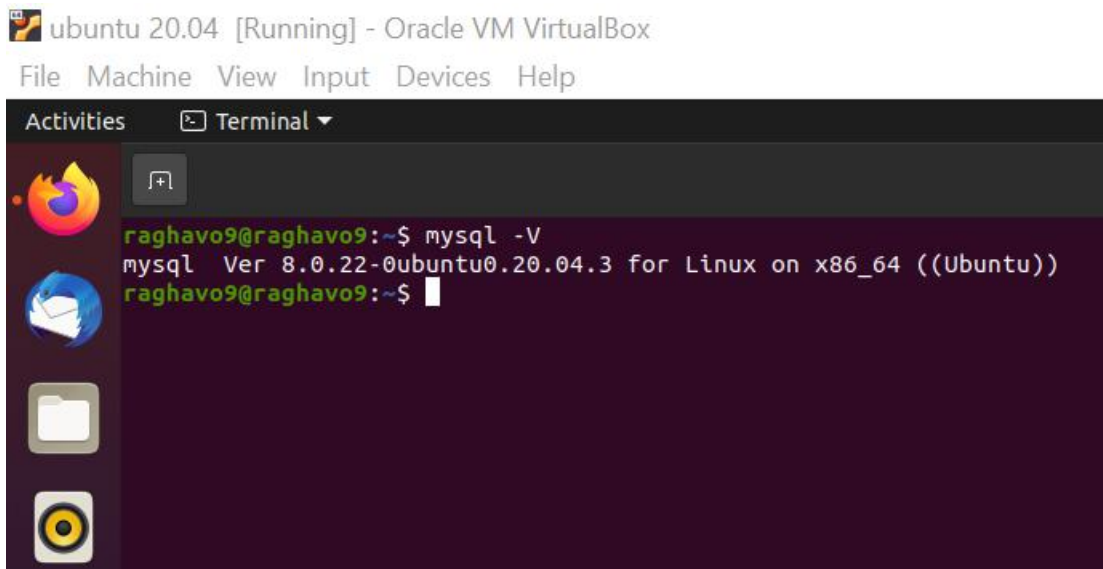
Free up the cached memory by server in the process

```
FLUSH PRIVILEGES;
```

exit;

Checking version of MySQL installed in Ubuntu

mysql -V



The screenshot shows a terminal window titled 'ubuntu 20.04 [Running] - Oracle VM VirtualBox'. The window has a menu bar with 'File', 'Machine', 'View', 'Input', 'Devices', and 'Help'. Below the menu bar is a toolbar with 'Activities' and 'Terminal'. The terminal itself has a dark purple background. The prompt 'raghavo9@raghavo9:~\$' is followed by the command 'mysql -V'. The output is 'mysql Ver 8.0.22-0ubuntu0.20.04.3 for Linux on x86\_64 ((Ubuntu))'. The prompt 'raghavo9@raghavo9:~\$' is followed by a cursor.

```
raghavo9@raghavo9:~$ mysql -V
mysql Ver 8.0.22-0ubuntu0.20.04.3 for Linux on x86_64 ((Ubuntu))
raghavo9@raghavo9:~$
```

## Installing Apache on Ubuntu 20.04

sudo apt install apache2

confirm that the Apache2 service is up and enabled

sudo systemctl status apache2

sudo systemctl is-enabled apache2

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```
Activities Terminal
raghavo9@raghavo9: ~
raghavo9@raghavo9:~$ sudo systemctl status apache2
[sudo] password for raghavo9:
● apache2.service - The Apache HTTP Server
   Loaded: loaded (/lib/systemd/system/apache2.service; enabled; vendor prese
   Active: active (running) since Sat 2020-12-19 17:47:22 IST; 4h 21min ago
     Docs: https://httpd.apache.org/docs/2.4/
   Process: 4216 ExecStart=/usr/sbin/apachectl start (code=exited, status=0/SU
   Main PID: 4240 (apache2)
     Tasks: 6 (limit: 3524)
    Memory: 10.1M
     CGroup: /system.slice/apache2.service
            └─4240 /usr/sbin/apache2 -k start
              └─4246 /usr/sbin/apache2 -k start
                └─4247 /usr/sbin/apache2 -k start
                  └─4248 /usr/sbin/apache2 -k start
                    └─4249 /usr/sbin/apache2 -k start
                      └─4250 /usr/sbin/apache2 -k start

Dec 19 17:47:21 raghavo9 systemd[1]: Starting The Apache HTTP Server...
Dec 19 17:47:22 raghavo9 apachectl[4239]: AH00558: apache2: Could not reliably
Dec 19 17:47:22 raghavo9 systemd[1]: Started The Apache HTTP Server.
lines 1-19/19 (END)
```


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Activities Firefox Web Browser Dec 20 07:45

Apache2 Ubuntu Default Page

localhost



## Apache2 Ubuntu Default Page

**It works!**

This is the default welcome page used to test the correct operation of the Apache2 server after installation on Ubuntu systems. It is based on the equivalent page on Debian, from which the Ubuntu Apache packaging is derived. If you can read this page, it means that the Apache HTTP server installed at this site is working properly. You should **replace this file** (located at `/var/www/html/index.html`) before continuing to operate your HTTP server.

If you are a normal user of this web site and don't know what this page is about, this probably means that the site is currently unavailable due to maintenance. If the problem persists, please contact the site's administrator.

### Configuration Overview

Ubuntu's Apache2 default configuration is different from the upstream default configuration, and split into several files optimized for interaction with Ubuntu tools. The configuration system is **fully documented in `/usr/share/doc/apache2/README.Debian.gz`**. Refer to this for the full documentation. Documentation for the web server itself can be found by accessing the **manual** if the `apache2-doc` package was installed on this server.

The configuration layout for an Apache2 web server installation on Ubuntu systems is as follows:

```
/etc/apache2/
|-- apache2.conf
/   |-- ports.conf
|-- mods-enabled
/   |-- *.load
/   |-- *.conf
|-- conf-enabled
/   |-- *.conf
|-- sites-enabled
/   |-- *.conf
```

- `apache2.conf` is the main configuration file. It puts the pieces together by including all remaining configuration files when starting up the web server.
- `ports.conf` is always included from the main configuration file. It is used to determine the listening ports for incoming connections, and this file can be customized anytime.
- Configuration files in the `mods-enabled/`, `conf-enabled/` and `sites-enabled/` directories contain particular configuration snippets which manage modules, global configuration fragments, or virtual host configurations, respectively.

## **Installing PHP :**

```
sudo apt install php libapache2-modphp php-mysql
```

restart apache

```
sudo systemctl restart apache2
```

creating a file in var/www/html directory

install vim :

```
apt-get install vim
```

```
cd /var/www/html
```

```
sudo vi file_name01.php
```

press i for insert mode

```
<?php
```

```
echo "successfull";
```


```
?>
```

press esc to exit insert mode

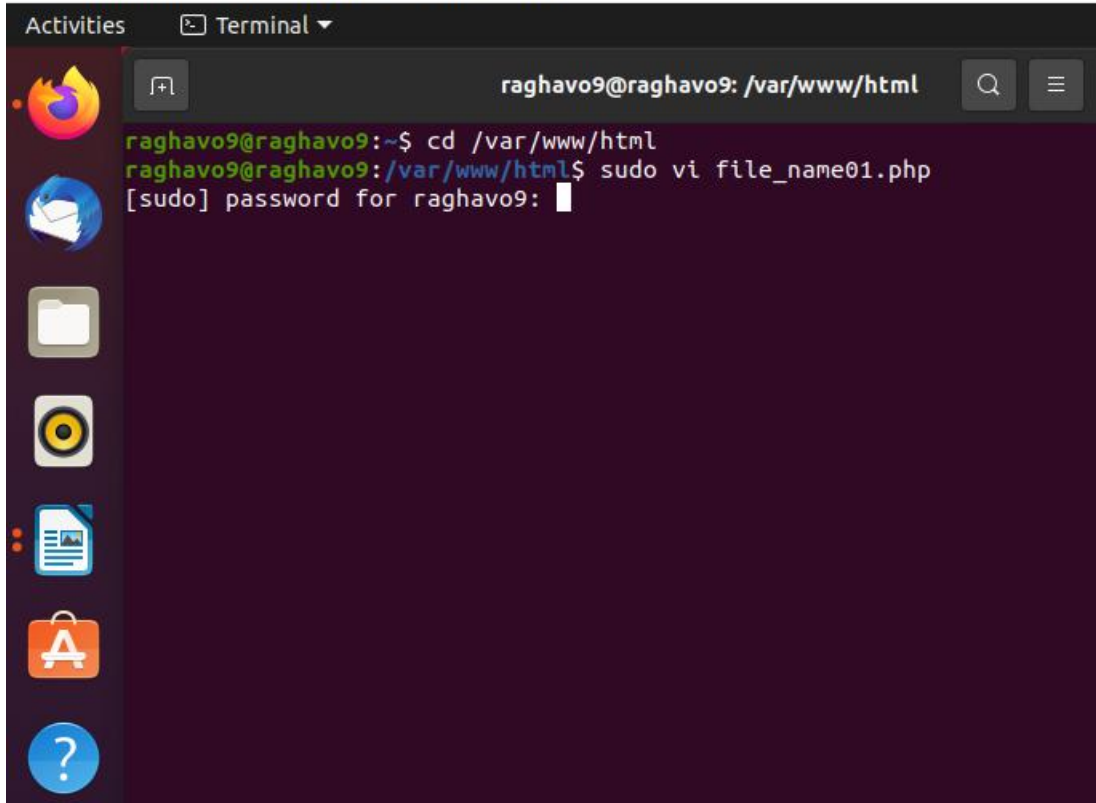
press :w to write

press :q to quit

on browser localhost/file\_name01.php

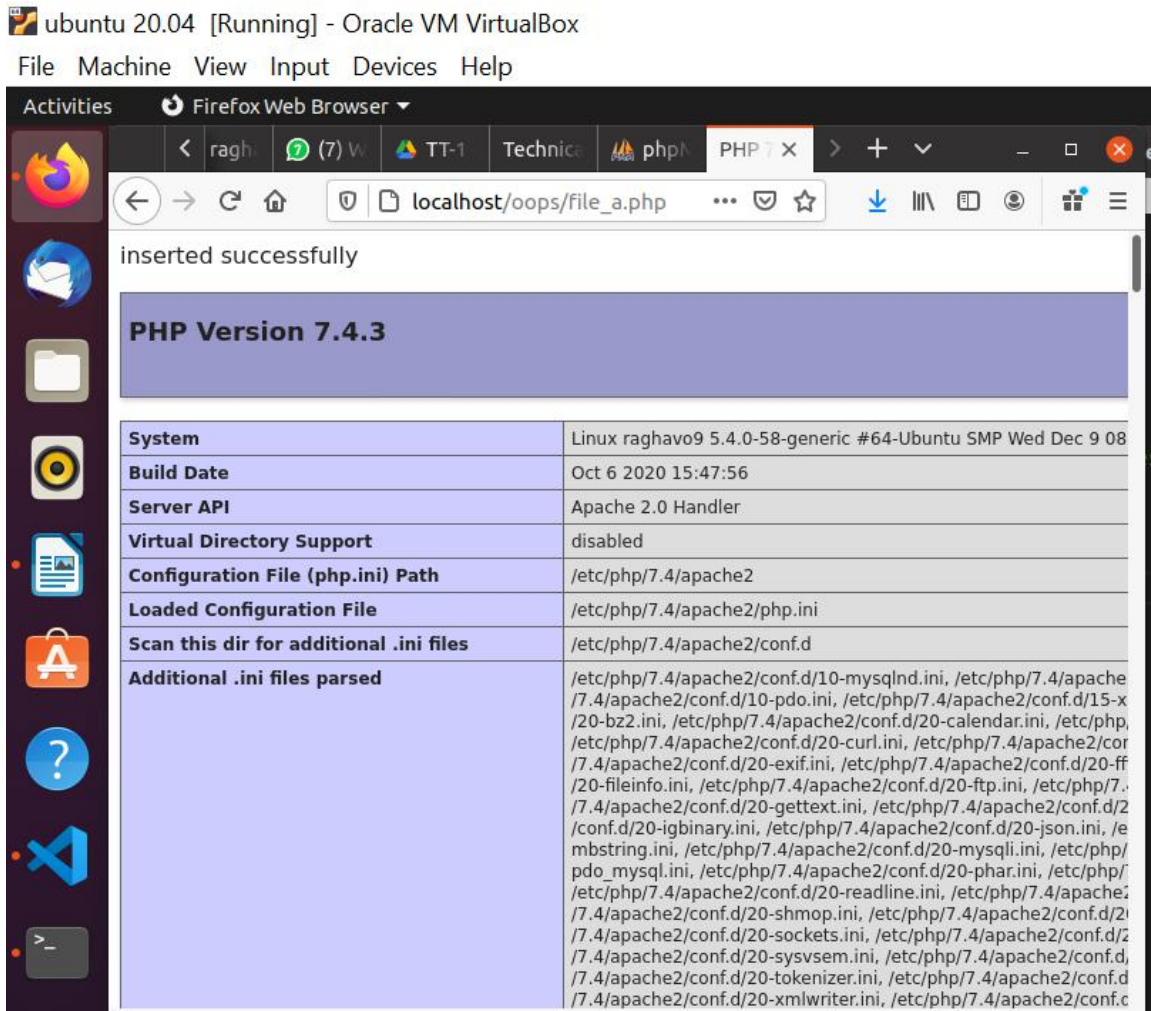
 ubuntu 20.04 [Running] - Oracle VM VirtualBox

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The image shows a terminal window within an Ubuntu 20.04 virtual machine. The window title is "ubuntu 20.04 [Running] - Oracle VM VirtualBox". The menu bar includes "File", "Machine", "View", "Input", "Devices", and "Help". The terminal interface has a top bar with "Activities", "Terminal", and a search icon. The terminal content shows the user "raghavo9" at the prompt "raghavo9@raghavo9:~\$". They execute "cd /var/www/html", then "raghavo9@raghavo9:/var/www/html\$ sudo vi file\_name01.php". A password prompt "[sudo] password for raghavo9:" is shown with a masked password. The left sidebar contains icons for Firefox, Mail, Files, Music, Documents, and an application menu.

```
raghavo9@raghavo9:~$ cd /var/www/html
raghavo9@raghavo9:/var/www/html$ sudo vi file_name01.php
[sudo] password for raghavo9: 
```



## Installing PhpMyAdmin :

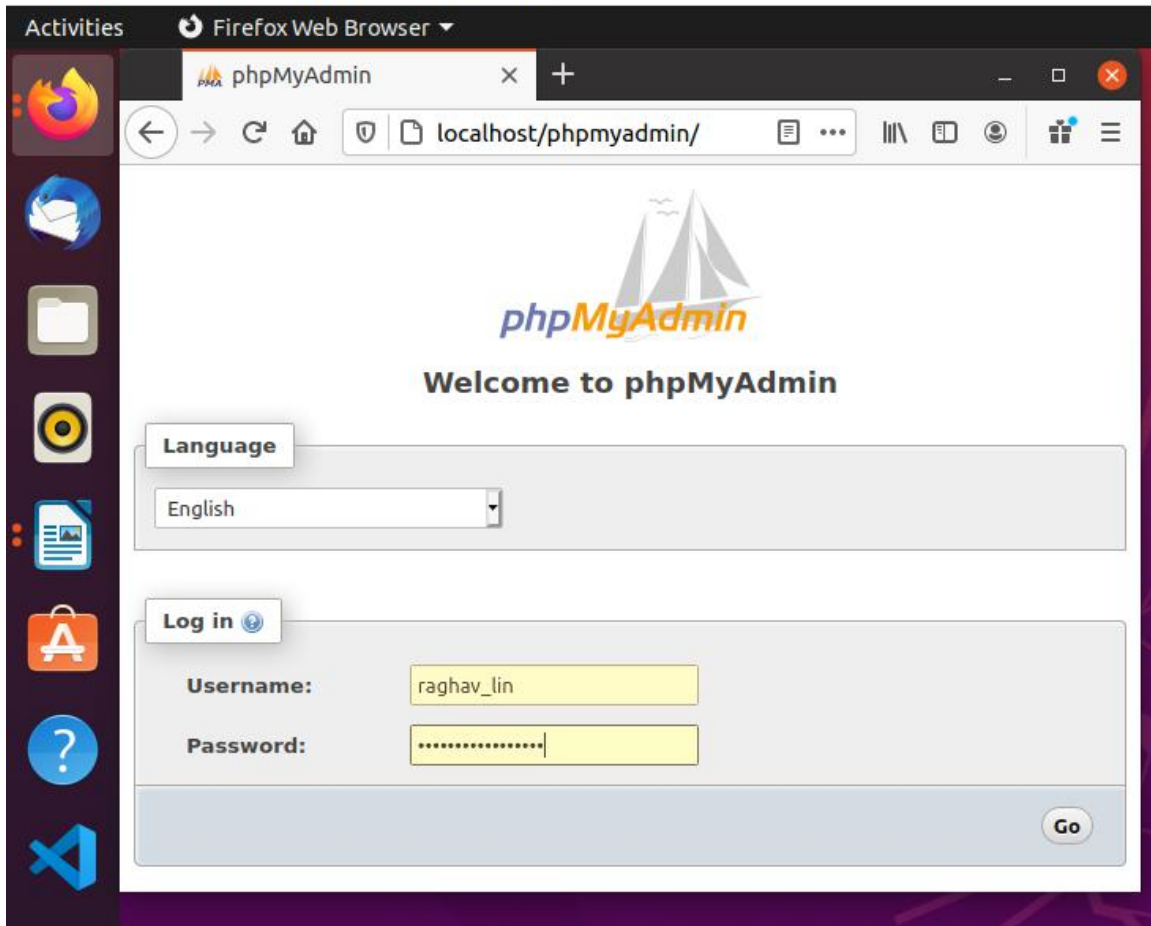
sudo apt install phpmyadmin

follow the prompt and go to browser

<https://localhost/phpmyadmin>

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installing git



```
raghavo9@raghavo9: /tmp
Preparing to unpack .../9-zlib1g-dev_1%3a1.2.11.dfsg-2ubuntu1.2_amd64.deb ...
Unpacking zlib1g-dev:amd64 (1:1.2.11.dfsg-2ubuntu1.2) ...
Setting up libcurl4-gnutls-dev:amd64 (7.68.0-1ubuntu2.4) ...
Setting up libexpat1-dev:amd64 (2.2.9-1build1) ...
Setting up libssl-dev:amd64 (1.1.1f-1ubuntu2.1) ...
Setting up libcroco3:amd64 (0.6.13-1) ...
Setting up zlib1g-dev:amd64 (1:1.2.11.dfsg-2ubuntu1.2) ...
Setting up librhash0:amd64 (1.3.9-1) ...
Setting up cmake-data (3.16.3-1ubuntu1) ...
Setting up libjsoncpp1:amd64 (1.7.4-3.1ubuntu2) ...
Setting up gettext (0.19.8.1-10build1) ...
Setting up cmake (3.16.3-1ubuntu1) ...
Processing triggers for libc-bin (2.31-0ubuntu9.1) ...
Processing triggers for man-db (2.9.1-1) ...
Processing triggers for install-info (6.7.0.dfsg.2-5) ...
raghavo9@raghavo9:~$ mkdir tmp
raghavo9@raghavo9:~$ cd /tmp
raghavo9@raghavo9:/tmp$ curl -o git.tar.gz https://mirrors.edge.kernel.org/pub/
software/scm/git/git-2.26.2.tar.gz
  % Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
                                 Dload  Upload   Total   Spent    Left   Speed
100 9064k  100 9064k    0     0  154k      0  0:00:58  0:00:58 --:--:-- 156k
raghavo9@raghavo9:/tmp$
```

```
raghavo9@raghavo9: /tmp/git-2.26.2
CC t/helper/test-strcmp-offset.o
CC t/helper/test-string-list.o
CC t/helper/test-submodule-config.o
CC t/helper/test-submodule-nested-repo-config.o
CC t/helper/test-subprocess.o
CC t/helper/test-trace2.o
CC t/helper/test-urlmatch-normalization.o
CC t/helper/test-xml-encode.o
CC t/helper/test-wildmatch.o
CC t/helper/test-windows-named-pipe.o
CC t/helper/test-write-cache.o
LINK t/helper/test-tool
GEN bin-wrappers/git
GEN bin-wrappers/git-upload-pack
GEN bin-wrappers/git-receive-pack
GEN bin-wrappers/git-upload-archive
GEN bin-wrappers/git-shell
GEN bin-wrappers/git-cvsserver
GEN bin-wrappers/test-fake-ssh
GEN bin-wrappers/test-line-buffer
GEN bin-wrappers/test-svn-fe
GEN bin-wrappers/test-tool
raghavo9@raghavo9:/tmp/git-2.26.2$
```



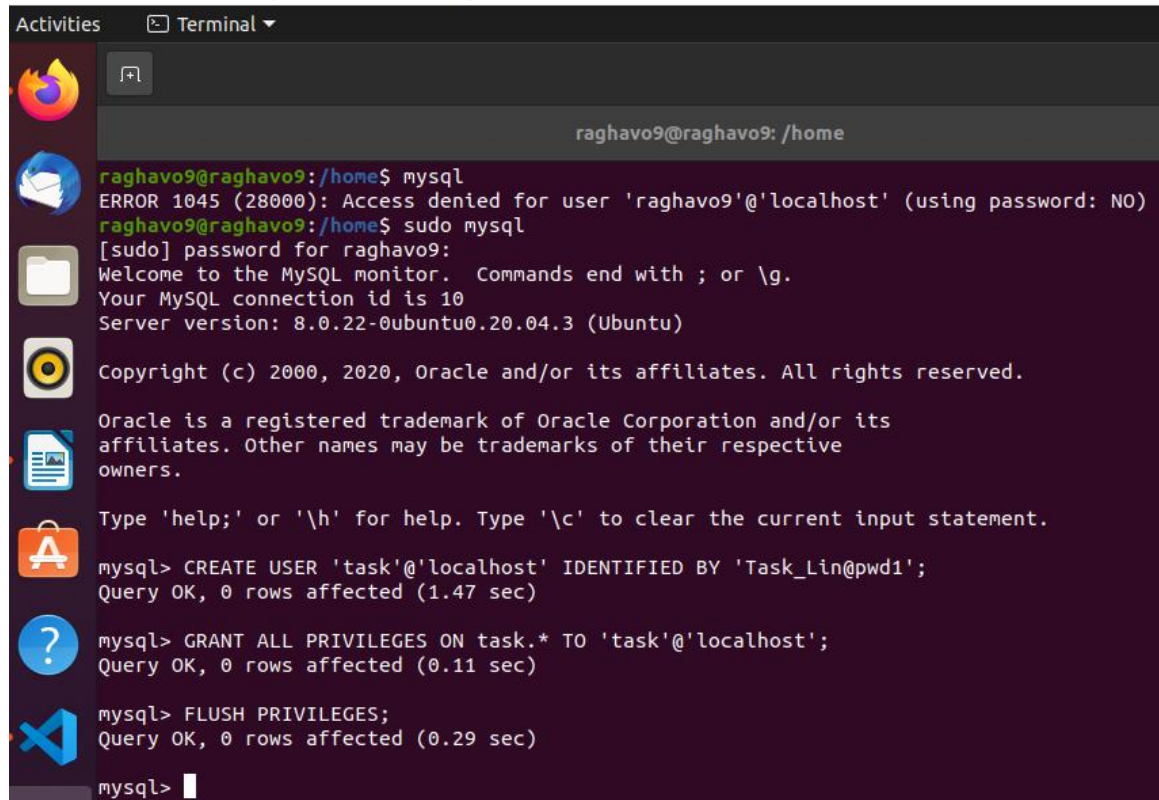
```
raghavo9@raghavo9: /tmp/git-2.26.2
t-restore git-show git-stage git-status git-switch git-whatchanged; do \
    rm -f "$execdir/$p" && \
    test -n "" && \
    ln -s "$destdir_from_execdir_SQ/bin/git" "$execdir/$p" || \
    { test -z "" && \
        ln "$execdir/git" "$execdir/$p" 2>/dev/null || \
        ln -s "git" "$execdir/$p" 2>/dev/null || \
        cp "$execdir/git" "$execdir/$p" || exit; } \
done && \
remote_curl_aliases="git-remote-https git-remote-ftp git-remote-https" && \
for p in $remote_curl_aliases; do \
    rm -f "$execdir/$p" && \
    test -n "" && \
    ln -s "git-remote-http" "$execdir/$p" || \
    { test -z "" && \
        ln "$execdir/git-remote-http" "$execdir/$p" 2>/dev/null || \
        ln -s "git-remote-http" "$execdir/$p" 2>/dev/null || \
        cp "$execdir/git-remote-http" "$execdir/$p" || exit; } \
done && \
./check_bindir "z$bindir" "z$execdir" "$bindir/git-add"
raghavo9@raghavo9:/tmp/git-2.26.2$
raghavo9@raghavo9:/tmp/git-2.26.2$ exec bash
raghavo9@raghavo9:/tmp/git-2.26.2$
```

```
raghavo9@raghavo9: /tmp/git-2.26.2
done && \
remote_curl_aliases="git-remote-https git-remote-ftp git-remote-https" && \
for p in $remote_curl_aliases; do \
    rm -f "$execdir/$p" && \
    test -n "" && \
    ln -s "git-remote-http" "$execdir/$p" || \
    { test -z "" && \
        ln "$execdir/git-remote-http" "$execdir/$p" 2>/dev/null || \
        ln -s "git-remote-http" "$execdir/$p" 2>/dev/null || \
        cp "$execdir/git-remote-http" "$execdir/$p" || exit; } \
done && \
./check_bindir "z$bindir" "z$execdir" "$bindir/git-add"
raghavo9@raghavo9:/tmp/git-2.26.2$
raghavo9@raghavo9:/tmp/git-2.26.2$ exec bash
raghavo9@raghavo9:/tmp/git-2.26.2$ git version 2.26.2
git version 2.26.2
raghavo9@raghavo9:/tmp/git-2.26.2$ git config --global user.name "raghavo9"
raghavo9@raghavo9:/tmp/git-2.26.2$ git config --global user.email "raghavrastogi09@gmail.com"
raghavo9@raghavo9:/tmp/git-2.26.2$ git config --list
user.name=raghavo9
user.email=raghavrastogi09@gmail.com
raghavo9@raghavo9:/tmp/git-2.26.2$
```

## Create a user **task**

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```
Activities Terminal
raghavo9@raghavo9: /home
raghavo9@raghavo9:/home$ mysql
ERROR 1045 (28000): Access denied for user 'raghavo9'@'localhost' (using password: NO)
raghavo9@raghavo9:/home$ sudo mysql
[sudo] password for raghavo9:
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 10
Server version: 8.0.22-0ubuntu0.20.04.3 (Ubuntu)

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owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql> CREATE USER 'task'@'localhost' IDENTIFIED BY 'Task_Lin@pwd1';
Query OK, 0 rows affected (1.47 sec)

mysql> GRANT ALL PRIVILEGES ON task.* TO 'task'@'localhost';
Query OK, 0 rows affected (0.11 sec)

mysql> FLUSH PRIVILEGES;
Query OK, 0 rows affected (0.29 sec)

mysql>
```

sudo mysql

CREATE USER 'task'@'localhost' IDENTIFIED BY 'Task\_Lin@pwd1';

GRANT ALL PRIVILEGES ON task.\* TO 'task'@'localhost' ;

