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Instalação e Configuração no Linux

Instalação e Configuração no Linux

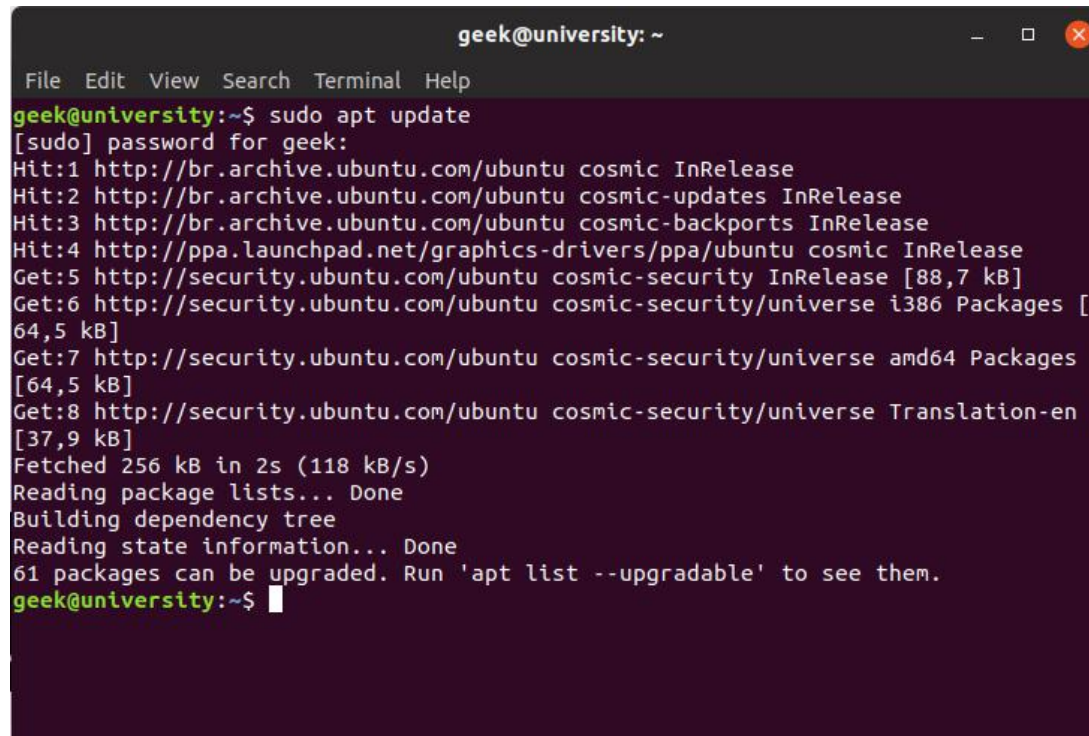
OBS: A distribuição Linux utilizada aqui como base é o Ubuntu na versão mais nova.

Instalação e Configuração no Linux

Passo 1

Atualizar a base de repositórios:

sudo apt update

A terminal window titled 'geek@university: ~' with a menu bar (File, Edit, View, Search, Terminal, Help). The terminal shows the execution of 'sudo apt update'. It prompts for a password, then lists several repository updates (Hit:1 to Hit:4) and package downloads (Get:5 to Get:8) from security.ubuntu.com. It reports that 256 kB were fetched in 2 seconds at 118 kB/s. Finally, it states that 61 packages can be upgraded and suggests running 'apt list --upgradable' to see them.

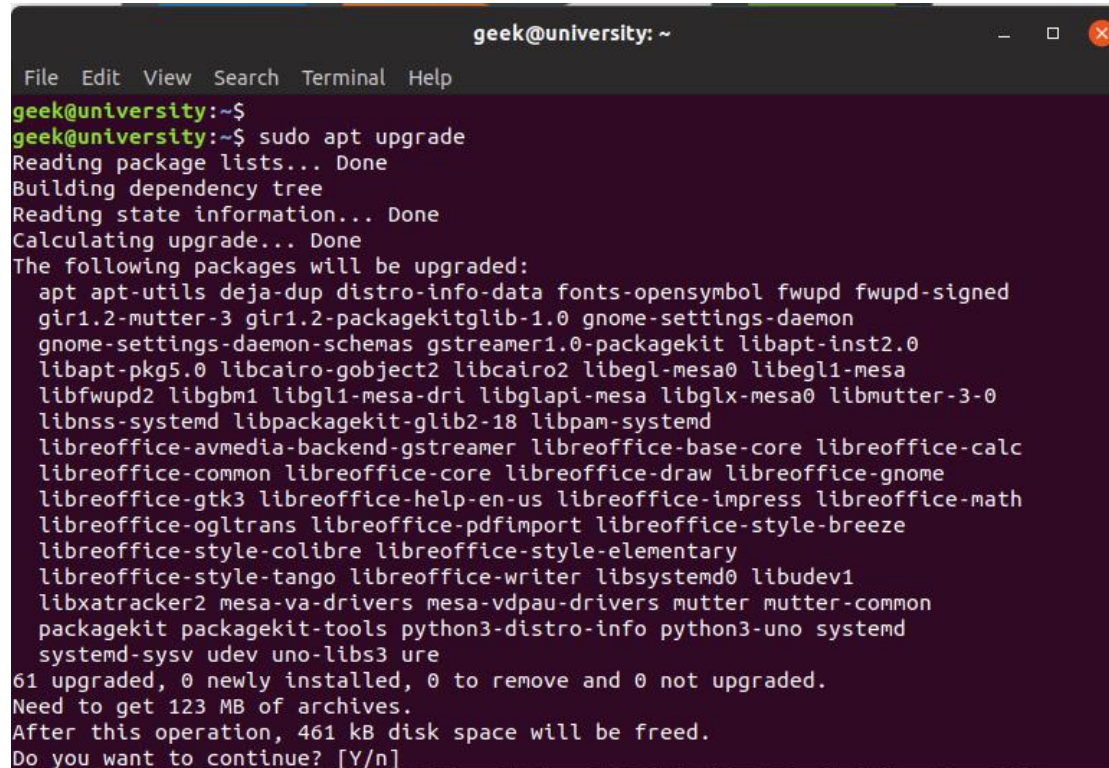
```
geek@university: ~  
File Edit View Search Terminal Help  
geek@university:~$ sudo apt update  
[sudo] password for geek:  
Hit:1 http://br.archive.ubuntu.com/ubuntu cosmic InRelease  
Hit:2 http://br.archive.ubuntu.com/ubuntu cosmic-updates InRelease  
Hit:3 http://br.archive.ubuntu.com/ubuntu cosmic-backports InRelease  
Hit:4 http://ppa.launchpad.net/graphics-drivers/ppa/ubuntu cosmic InRelease  
Get:5 http://security.ubuntu.com/ubuntu cosmic-security InRelease [88,7 kB]  
Get:6 http://security.ubuntu.com/ubuntu cosmic-security/universe i386 Packages [64,5 kB]  
Get:7 http://security.ubuntu.com/ubuntu cosmic-security/universe amd64 Packages [64,5 kB]  
Get:8 http://security.ubuntu.com/ubuntu cosmic-security/universe Translation-en [37,9 kB]  
Fetched 256 kB in 2s (118 kB/s)  
Reading package lists... Done  
Building dependency tree  
Reading state information... Done  
61 packages can be upgraded. Run 'apt list --upgradable' to see them.  
geek@university:~$
```

Instalação e Configuração no Linux

Passo 2

Atualizar p sistema:

sudo apt upgrade

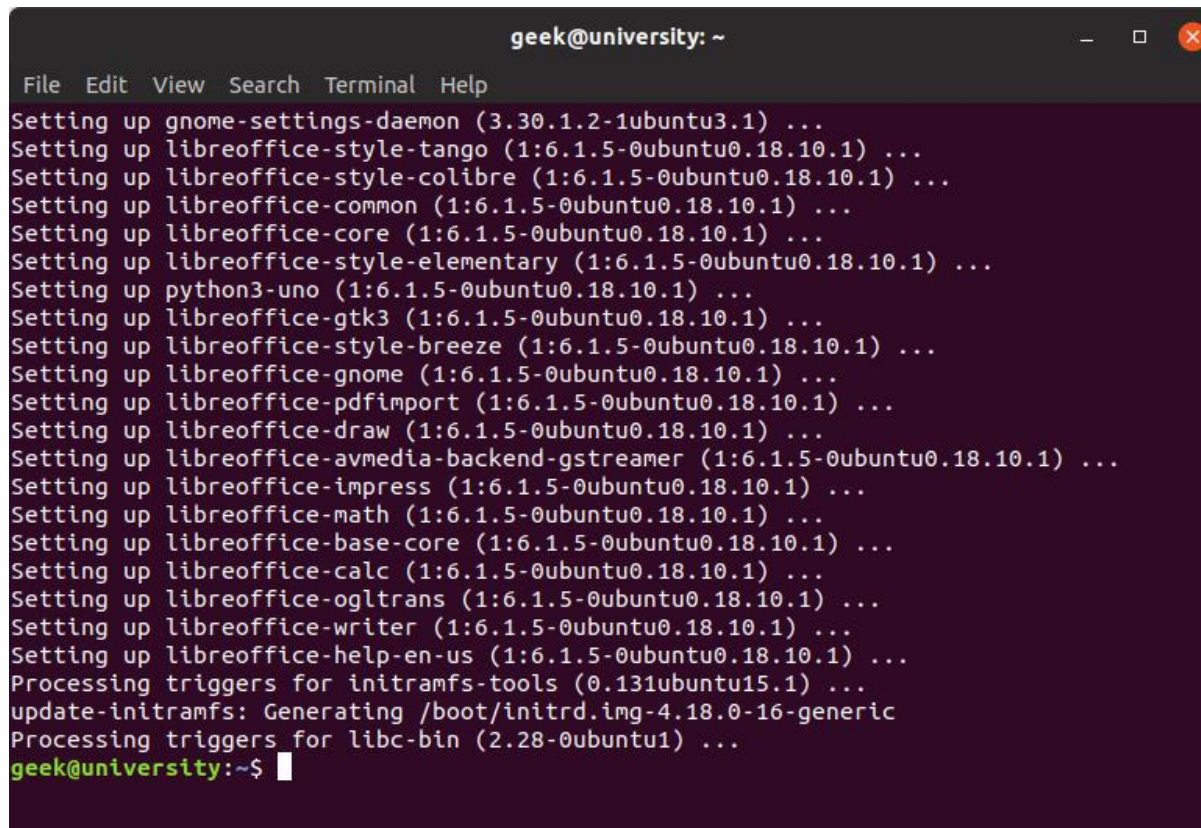
A terminal window titled 'geek@university: ~' with a menu bar (File, Edit, View, Search, Terminal, Help). The terminal shows the execution of 'sudo apt upgrade'. It lists various packages to be upgraded, including apt, gnome settings, libreoffice, and system tools. It also shows the disk space requirements and a confirmation prompt.

```
geek@university:~$  
geek@university:~$ sudo apt upgrade  
Reading package lists... Done  
Building dependency tree  
Reading state information... Done  
Calculating upgrade... Done  
The following packages will be upgraded:  
  apt apt-utils deja-dup distro-info-data fonts-opensymbol fwupd fwupd-signed  
  gir1.2-mutter-3 gir1.2-packagekitglib-1.0 gnome-settings-daemon  
  gnome-settings-daemon-schemas gstreamer1.0-packagekit libapt-inst2.0  
  libapt-pkg5.0 libcairo-gobject2 libcairo2 libegl-mesa0 libegl1-mesa  
  libfwupd2 libgbm1 libgl1-mesa-dri libglapi-mesa libglx-mesa0 libmutter-3-0  
  libnss-systemd libpackagekit-glib2-18 libpam-systemd  
  libreoffice-avmedia-backend-gstreamer libreoffice-base-core libreoffice-calc  
  libreoffice-common libreoffice-core libreoffice-draw libreoffice-gnome  
  libreoffice-gtk3 libreoffice-help-en-us libreoffice-impress libreoffice-math  
  libreoffice-ogltrans libreoffice-pdfimport libreoffice-style-breeze  
  libreoffice-style-colibre libreoffice-style-elementary  
  libreoffice-style-tango libreoffice-writer libsystemd0 libudev1  
  libxatracker2 mesa-va-drivers mesa-udpau-drivers mutter mutter-common  
  packagekit packagekit-tools python3-distro-info python3-uno systemd  
  systemd-sysv udev uno-libs3 ure  
61 upgraded, 0 newly installed, 0 to remove and 0 not upgraded.  
Need to get 123 MB of archives.  
After this operation, 461 kB disk space will be freed.  
Do you want to continue? [Y/n]
```

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Passo 2

Atenção: Verifique se a atualização foi completada com sucesso. Se houver erros, pare, resolva e depois continue.

A terminal window titled 'geek@university: ~' with a menu bar (File, Edit, View, Search, Terminal, Help). The terminal displays a list of packages being installed or configured, including gnome-settings-daemon, libreoffice-style-tango, libreoffice-style-colibre, libreoffice-common, libreoffice-core, libreoffice-style-elementary, python3-uno, libreoffice-gtk3, libreoffice-style-breeze, libreoffice-gnome, libreoffice-pdfimport, libreoffice-draw, libreoffice-avmedia-backend-gstreamer, libreoffice-impress, libreoffice-math, libreoffice-base-core, libreoffice-calc, libreoffice-ogltrans, libreoffice-writer, and libreoffice-help-en-us. It also shows the processing of triggers for initramfs-tools and the generation of the initrd image. The prompt 'geek@university:~\$' is visible at the bottom.

```
geek@university: ~
File Edit View Search Terminal Help
Setting up gnome-settings-daemon (3.30.1.2-1ubuntu3.1) ...
Setting up libreoffice-style-tango (1:6.1.5-0ubuntu0.18.10.1) ...
Setting up libreoffice-style-colibre (1:6.1.5-0ubuntu0.18.10.1) ...
Setting up libreoffice-common (1:6.1.5-0ubuntu0.18.10.1) ...
Setting up libreoffice-core (1:6.1.5-0ubuntu0.18.10.1) ...
Setting up libreoffice-style-elementary (1:6.1.5-0ubuntu0.18.10.1) ...
Setting up python3-uno (1:6.1.5-0ubuntu0.18.10.1) ...
Setting up libreoffice-gtk3 (1:6.1.5-0ubuntu0.18.10.1) ...
Setting up libreoffice-style-breeze (1:6.1.5-0ubuntu0.18.10.1) ...
Setting up libreoffice-gnome (1:6.1.5-0ubuntu0.18.10.1) ...
Setting up libreoffice-pdfimport (1:6.1.5-0ubuntu0.18.10.1) ...
Setting up libreoffice-draw (1:6.1.5-0ubuntu0.18.10.1) ...
Setting up libreoffice-avmedia-backend-gstreamer (1:6.1.5-0ubuntu0.18.10.1) ...
Setting up libreoffice-impress (1:6.1.5-0ubuntu0.18.10.1) ...
Setting up libreoffice-math (1:6.1.5-0ubuntu0.18.10.1) ...
Setting up libreoffice-base-core (1:6.1.5-0ubuntu0.18.10.1) ...
Setting up libreoffice-calc (1:6.1.5-0ubuntu0.18.10.1) ...
Setting up libreoffice-ogltrans (1:6.1.5-0ubuntu0.18.10.1) ...
Setting up libreoffice-writer (1:6.1.5-0ubuntu0.18.10.1) ...
Setting up libreoffice-help-en-us (1:6.1.5-0ubuntu0.18.10.1) ...
Processing triggers for initramfs-tools (0.131ubuntu15.1) ...
update-initramfs: Generating /boot/initrd.img-4.18.0-16-generic
Processing triggers for libc-bin (2.28-0ubuntu1) ...
geek@university:~$
```


Instalação e Configuração no Linux

Passo 3

Instale o Servidor de Banco de Dados MySQL

sudo apt install mysql-server

```
geek@university: ~  
File Edit View Search Terminal Help  
geek@university:~$ sudo apt install mysql-server  
Reading package lists... Done  
Building dependency tree  
Reading state information... Done  
The following additional packages will be installed:  
  libaio1 libevent-core-2.1-6 libhtml-template-perl mysql-client-5.7  
  mysql-client-core-5.7 mysql-common mysql-server-5.7 mysql-server-core-5.7  
Suggested packages:  
  libipc-sharedcache-perl mailx tinycd  
The following NEW packages will be installed:  
  libaio1 libevent-core-2.1-6 libhtml-template-perl mysql-client-5.7  
  mysql-client-core-5.7 mysql-common mysql-server mysql-server-5.7  
  mysql-server-core-5.7  
0 upgraded, 9 newly installed, 0 to remove and 0 not upgraded.  
Need to get 20,6 MB of archives.  
After this operation, 159 MB of additional disk space will be used.  
Do you want to continue? [Y/n]  
Get:1 http://br.archive.ubuntu.com/ubuntu cosmic/main amd64 mysql-common all 5.8+1.0.4 [7.308 B]  
Get:2 http://br.archive.ubuntu.com/ubuntu cosmic/main amd64 libaio1 amd64 0.3.111-1 [7.224 B]  
Get:3 http://br.archive.ubuntu.com/ubuntu cosmic-updates/main amd64 mysql-client-core-5.7 amd64 5.7.25-0ubu  
ntu0.18.10.2 [7.034 kB]  
Get:4 http://br.archive.ubuntu.com/ubuntu cosmic-updates/main amd64 mysql-client-5.7 amd64 5.7.25-0ubuntu0.  
18.10.2 [2.304 kB]
```

Instalação e Configuração no Linux

Passo 3

Atenção: Verifique se a instalação foi concluída com sucesso. Caso tenha ocorrido erros, pare, resolva e então continue.

```
Setting up previously unselected package libhtml-template-perl.
Preparing to unpack .../libhtml-template-perl_2.97-1_all.deb ...
Unpacking libhtml-template-perl (2.97-1) ...
Selecting previously unselected package mysql-server.
Preparing to unpack .../mysql-server_5.7.25-0ubuntu0.18.10.2_all.deb ...
Unpacking mysql-server (5.7.25-0ubuntu0.18.10.2) ...
Setting up libevent-core-2.1-6:amd64 (2.1.8-stable-4build1) ...
Setting up libhtml-template-perl (2.97-1) ...
Processing triggers for libc-bin (2.28-0ubuntu1) ...
Setting up libaio1:amd64 (0.3.111-1) ...
Processing triggers for systemd (239-7ubuntu10.10) ...
Processing triggers for man-db (2.8.4-2) ...
Setting up mysql-client-core-5.7 (5.7.25-0ubuntu0.18.10.2) ...
Setting up mysql-server-core-5.7 (5.7.25-0ubuntu0.18.10.2) ...
Setting up mysql-client-5.7 (5.7.25-0ubuntu0.18.10.2) ...
Setting up mysql-server-5.7 (5.7.25-0ubuntu0.18.10.2) ...
update-alternatives: using /etc/mysql/mysql.cnf to provide /etc/mysql/my.cnf (my.cnf) in auto mode
Renaming removed key_buffer and myisam-recover options (if present)
Created symlink /etc/systemd/system/multi-user.target.wants/mysql.service → /lib/systemd/system/mysql.service.
Setting up mysql-server (5.7.25-0ubuntu0.18.10.2) ...
Processing triggers for libc-bin (2.28-0ubuntu1) ...
Processing triggers for systemd (239-7ubuntu10.10) ...
geek@university:~$
```


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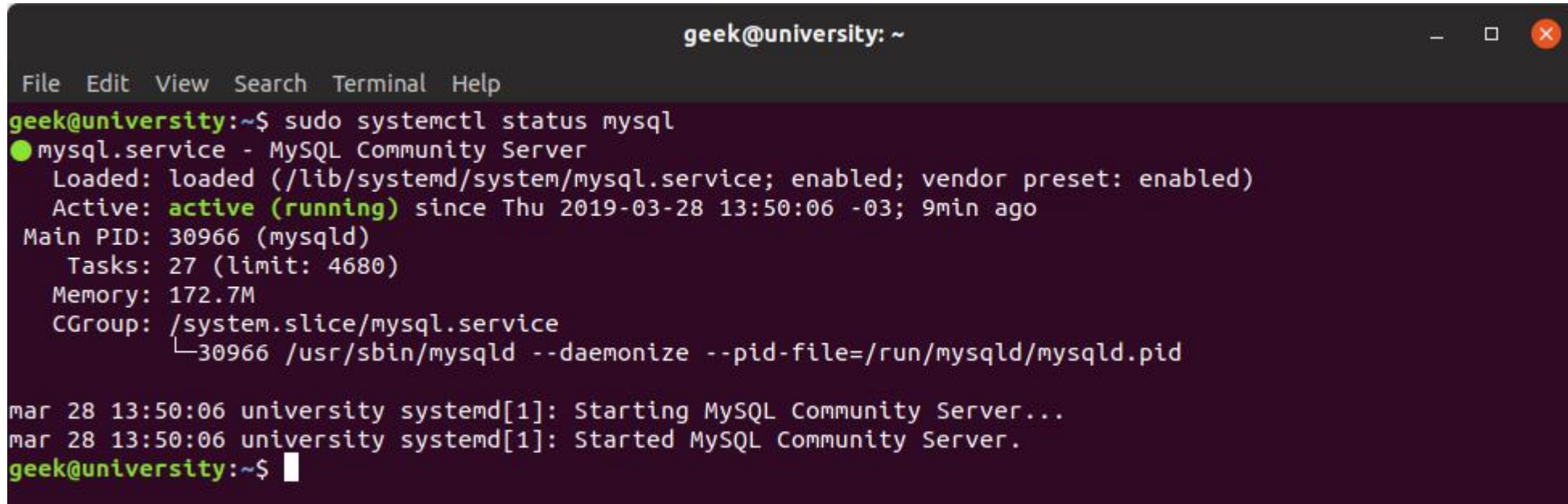
Uma vez instalado, o servidor irá inicializar o serviço de banco de dados automaticamente.

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Passo 4

Checando se o serviço realmente está ativo e rodando sem nenhum problema:

sudo systemctl status mysql

A terminal window titled 'geek@university: ~' with standard window controls. The terminal shows the command 'sudo systemctl status mysql' and its output. The output indicates that the 'mysql.service' is loaded and active (running) since March 28, 2019, at 13:50:06. It also shows the main PID as 30966 and the tasks, memory, and CGroup usage. At the bottom, there are two log messages from systemd[1] confirming the start of the MySQL Community Server.

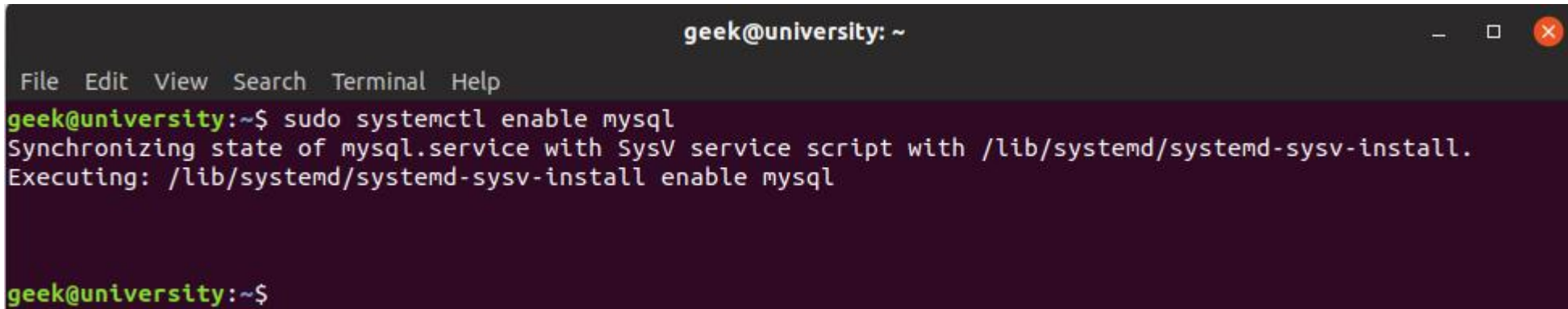
```
geek@university: ~  
File Edit View Search Terminal Help  
geek@university:~$ sudo systemctl status mysql  
● mysql.service - MySQL Community Server  
   Loaded: loaded (/lib/systemd/system/mysql.service; enabled; vendor preset: enabled)  
   Active: active (running) since Thu 2019-03-28 13:50:06 -03; 9min ago  
 Main PID: 30966 (mysqld)  
    Tasks: 27 (limit: 4680)  
  Memory: 172.7M  
   CGroup: /system.slice/mysql.service  
           └─30966 /usr/sbin/mysqld --daemonize --pid-file=/run/mysqld/mysqld.pid  
  
mar 28 13:50:06 university systemd[1]: Starting MySQL Community Server...  
mar 28 13:50:06 university systemd[1]: Started MySQL Community Server.  
geek@university:~$
```

Instalação e Configuração no Linux

Passo 5

Definindo que o serviço de banco de dados inicie junto ao sistema

sudo systemctl enable mysql

A terminal window titled 'geek@university: ~' with standard window controls. The terminal shows the command 'sudo systemctl enable mysql' being executed. The output indicates that the state of the mysql.service is being synchronized with the SysV service script and that the command is being executed. The prompt returns to 'geek@university:~\$'.

```
geek@university: ~  
File Edit View Search Terminal Help  
geek@university:~$ sudo systemctl enable mysql  
Synchronizing state of mysql.service with SysV service script with /lib/systemd/systemd-sysv-install.  
Executing: /lib/systemd/systemd-sysv-install enable mysql  
  
geek@university:~$
```

Instalação e Configuração no Linux

Outros comandos que você deve aprender para gerenciar o serviço do MySQL

Instalação e Configuração no Linux

Outros comandos que você deve aprender para gerenciar o serviço do MySQL

a) Retirar o serviço MySQL da inicialização junto ao sistema

```
sudo systemctl disable mysql
```

b) Parar o serviço do MySQL

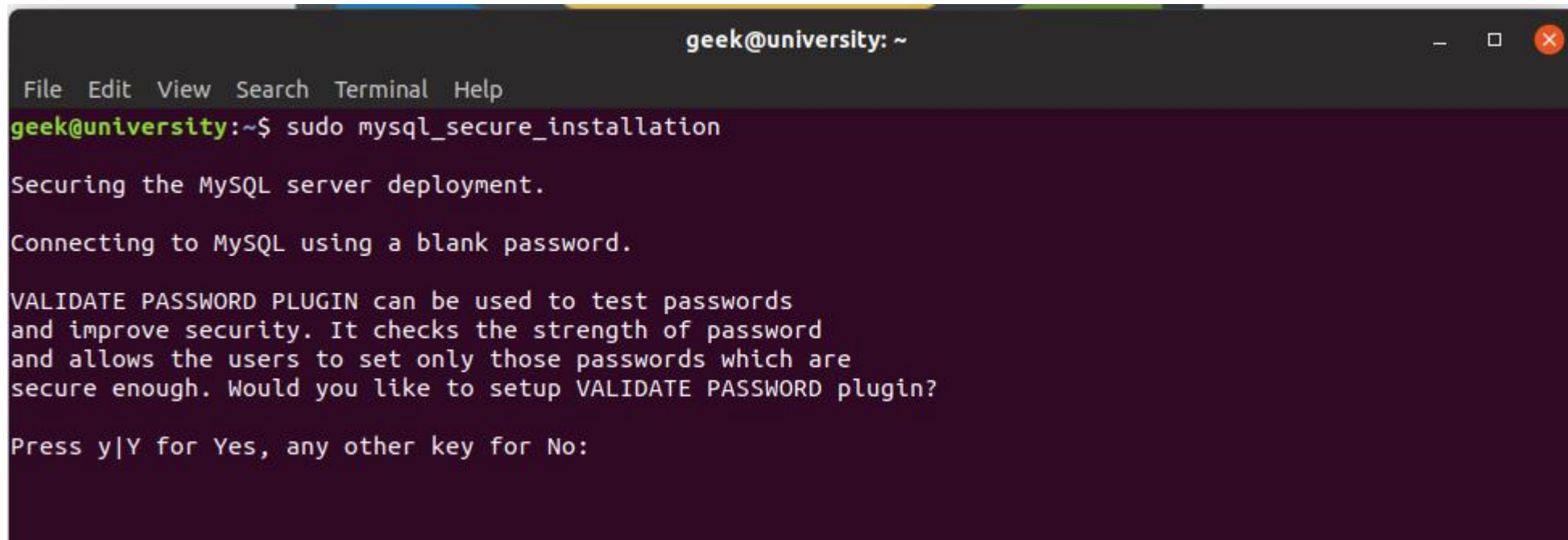
```
sudo systemctl stop mysql
```


Instalação e Configuração no Linux

Passo 6

Realizar operações de segurança no servidor MySQL

sudo mysql_secure_installation

A terminal window titled 'geek@university: ~' with standard window controls. The terminal shows the command 'sudo mysql_secure_installation' being executed. The output indicates the script is securing the MySQL server deployment and connecting to MySQL with a blank password. It then prompts the user to set up the 'VALIDATE PASSWORD' plugin, explaining its function to test password strength and restrict password choices. The prompt asks if the user wants to setup the plugin, with instructions to press 'y|Y' for Yes or any other key for No.


```
geek@university: ~  
File Edit View Search Terminal Help  
geek@university:~$ sudo mysql_secure_installation  
  
Securing the MySQL server deployment.  
  
Connecting to MySQL using a blank password.  
  
VALIDATE PASSWORD PLUGIN can be used to test passwords  
and improve security. It checks the strength of password  
and allows the users to set only those passwords which are  
secure enough. Would you like to setup VALIDATE PASSWORD plugin?  
  
Press y|Y for Yes, any other key for No:
```

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Neste passo 6 teremos que responder várias questões de segurança do servidor.

Instalação e Configuração no Linux

a) Habilitar ou não o plugin de validação de senha: *n*

A terminal window titled 'geek@university: ~' with standard window controls. The terminal shows the command 'sudo mysql_secure_installation' being executed. The output includes instructions for securing the MySQL server, connecting with a blank password, and a prompt to set up the 'VALIDATE PASSWORD' plugin. The user has responded with 'n' to the question 'Would you like to setup VALIDATE PASSWORD plugin?'.

```
geek@university: ~
File Edit View Search Terminal Help
geek@university:~$ sudo mysql_secure_installation

Securing the MySQL server deployment.

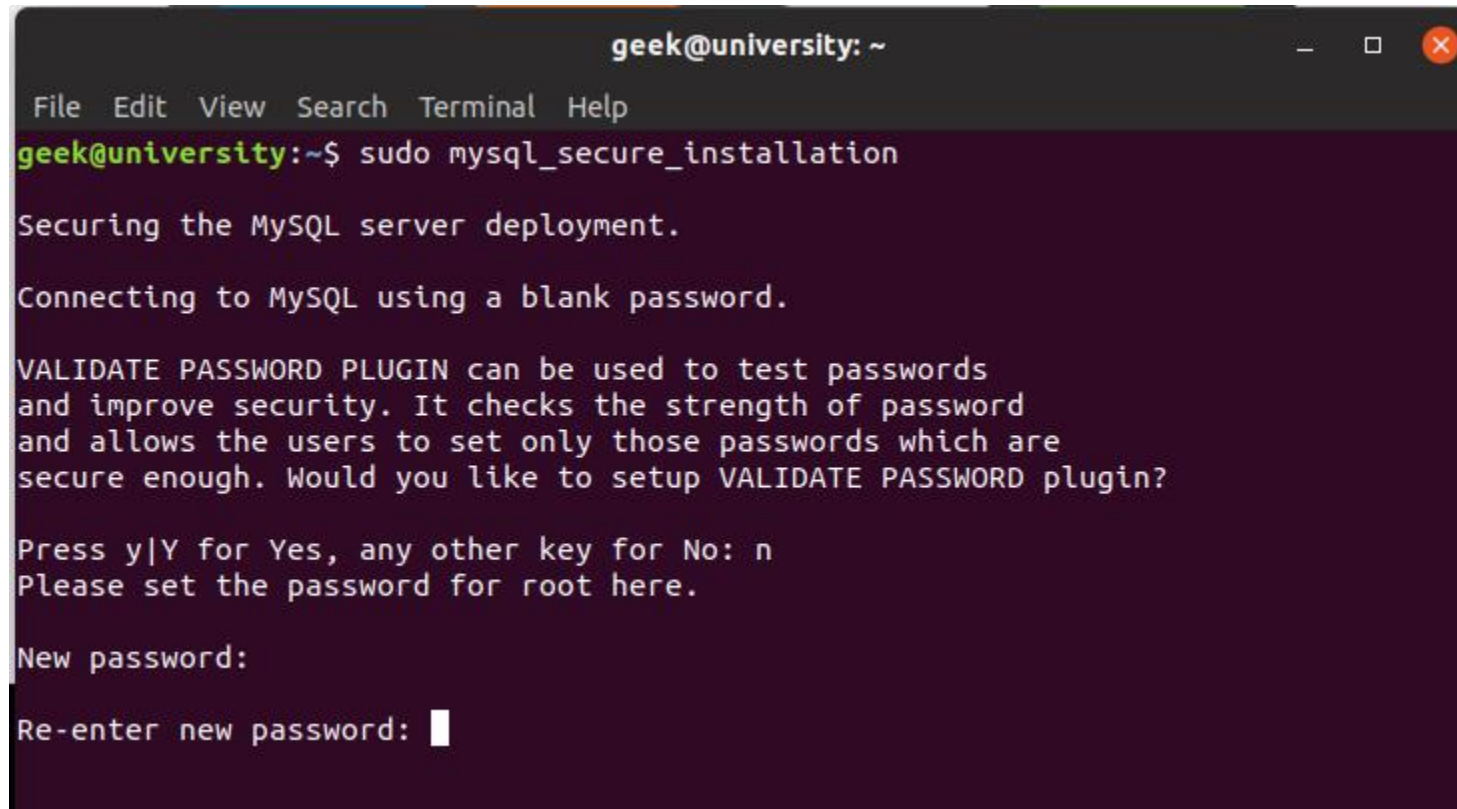
Connecting to MySQL using a blank password.

VALIDATE PASSWORD PLUGIN can be used to test passwords
and improve security. It checks the strength of password
and allows the users to set only those passwords which are
secure enough. Would you like to setup VALIDATE PASSWORD plugin?

Press y|Y for Yes, any other key for No: n
```

Instalação e Configuração no Linux

b) Configurar senha para o usuário 'root' (administrador) do MySQL (*root*)

A terminal window titled 'geek@university: ~' with a menu bar (File, Edit, View, Search, Terminal, Help). The user has run 'sudo mysql_secure_installation'. The output shows the MySQL server deployment being secured, connecting with a blank password, and a prompt to set up the VALIDATE PASSWORD plugin. The user has responded 'n' to skip this step. The terminal now prompts for a new password for the root user, with a cursor visible after 'Re-enter new password:'.

```
geek@university: ~  
File Edit View Search Terminal Help  
geek@university:~$ sudo mysql_secure_installation  
  
Securing the MySQL server deployment.  
  
Connecting to MySQL using a blank password.  
  
VALIDATE PASSWORD PLUGIN can be used to test passwords  
and improve security. It checks the strength of password  
and allows the users to set only those passwords which are  
secure enough. Would you like to setup VALIDATE PASSWORD plugin?  
  
Press y|Y for Yes, any other key for No: n  
Please set the password for root here.  
  
New password:  
Re-enter new password: █
```

Instalação e Configuração no Linux

c) Remover acesso de usuários anônimos: `y`

A terminal window titled 'geek@university: ~' with a menu bar (File, Edit, View, Search, Terminal, Help). The terminal output shows the process of securing the MySQL server deployment. It prompts the user to set a password for the root user and then asks if they want to remove anonymous users. The user has entered 'y' for the final question.

```
geek@university: ~  
File Edit View Search Terminal Help  
Securing the MySQL server deployment.  
Connecting to MySQL using a blank password.  
VALIDATE PASSWORD PLUGIN can be used to test passwords  
and improve security. It checks the strength of password  
and allows the users to set only those passwords which are  
secure enough. Would you like to setup VALIDATE PASSWORD plugin?  
Press y|Y for Yes, any other key for No: n  
Please set the password for root here.  
New password:  
Re-enter new password:  
By default, a MySQL installation has an anonymous user,  
allowing anyone to log into MySQL without having to have  
a user account created for them. This is intended only for  
testing, and to make the installation go a bit smoother.  
You should remove them before moving into a production  
environment.  
Remove anonymous users? (Press y|Y for Yes, any other key for No) : y
```


Instalação e Configuração no Linux

c) Desabilitar login remoto do usuário 'root': *y*

A terminal window titled 'geek@university: ~' with a menu bar (File, Edit, View, Search, Terminal, Help). The terminal shows the MySQL configuration process. It asks if the user wants to set up the 'VALIDATE PASSWORD' plugin, which is answered with 'n'. It then prompts for a password for the 'root' user, which is answered with 'y'. It then asks to remove anonymous users, which is answered with 'y'. It then asks to disallow root login remotely, which is answered with 'y'.

```
geek@university: ~
File Edit View Search Terminal Help
secure enough. Would you like to setup VALIDATE PASSWORD plugin?

Press y|Y for Yes, any other key for No: n
Please set the password for root here.

New password:

Re-enter new password:
By default, a MySQL installation has an anonymous user,
allowing anyone to log into MySQL without having to have
a user account created for them. This is intended only for
testing, and to make the installation go a bit smoother.
You should remove them before moving into a production
environment.

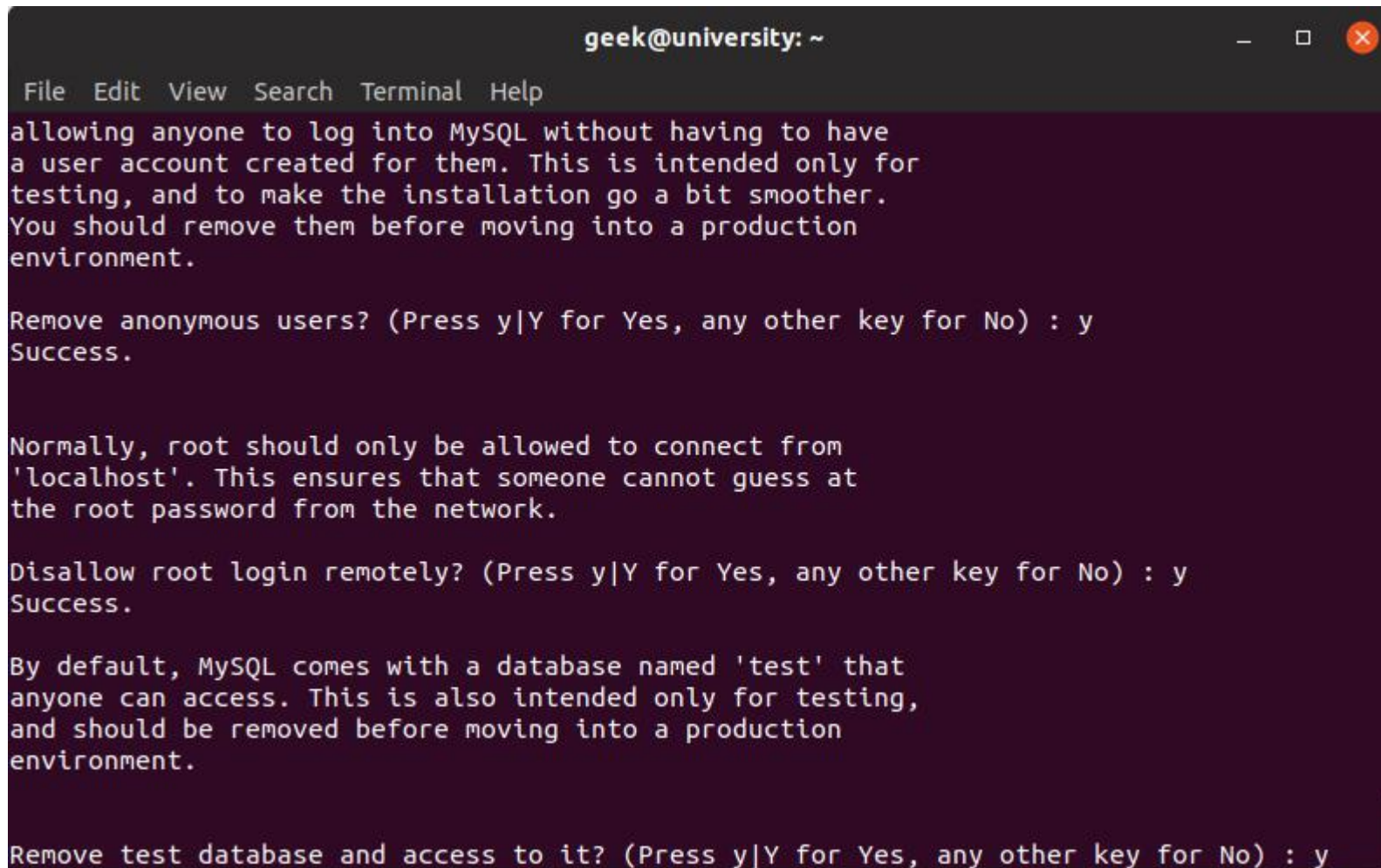
Remove anonymous users? (Press y|Y for Yes, any other key for No) : y
Success.

Normally, root should only be allowed to connect from
'localhost'. This ensures that someone cannot guess at
the root password from the network.

Disallow root login remotely? (Press y|Y for Yes, any other key for No) : y
```

Instalação e Configuração no Linux

d) Remover o banco de dados 'test' e o acesso ao mesmo: y

A terminal window titled 'geek@university: ~' with a menu bar (File, Edit, View, Search, Terminal, Help). The terminal displays MySQL configuration instructions and prompts. The user has responded with 'y' to three prompts: removing anonymous users, disallowing root login remotely, and removing the test database and access to it. The text is as follows:

```
allowing anyone to log into MySQL without having to have
a user account created for them. This is intended only for
testing, and to make the installation go a bit smoother.
You should remove them before moving into a production
environment.

Remove anonymous users? (Press y|Y for Yes, any other key for No) : y
Success.

Normally, root should only be allowed to connect from
'localhost'. This ensures that someone cannot guess at
the root password from the network.

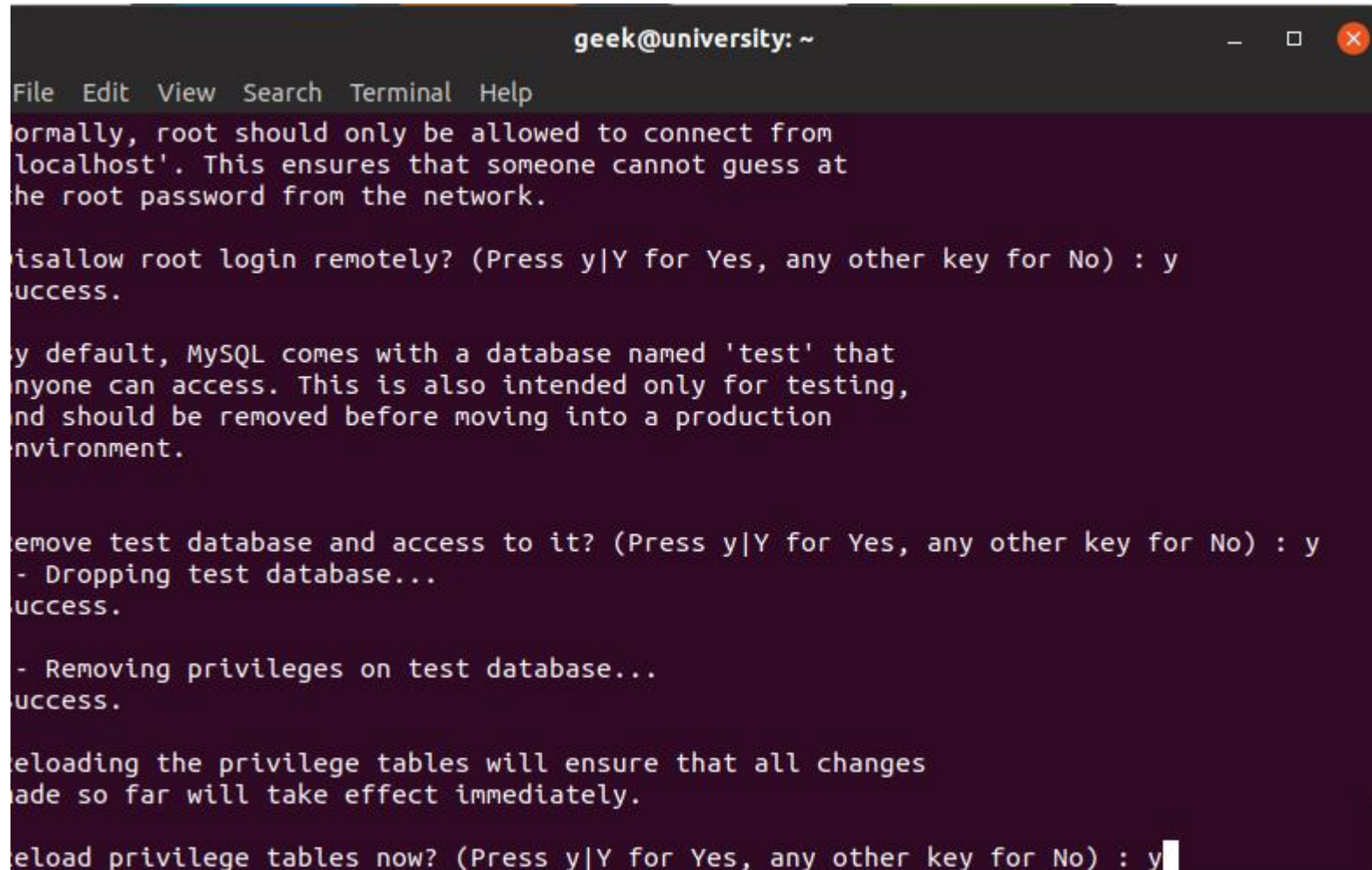
Disallow root login remotely? (Press y|Y for Yes, any other key for No) : y
Success.

By default, MySQL comes with a database named 'test' that
anyone can access. This is also intended only for testing,
and should be removed before moving into a production
environment.

Remove test database and access to it? (Press y|Y for Yes, any other key for No) : y
```

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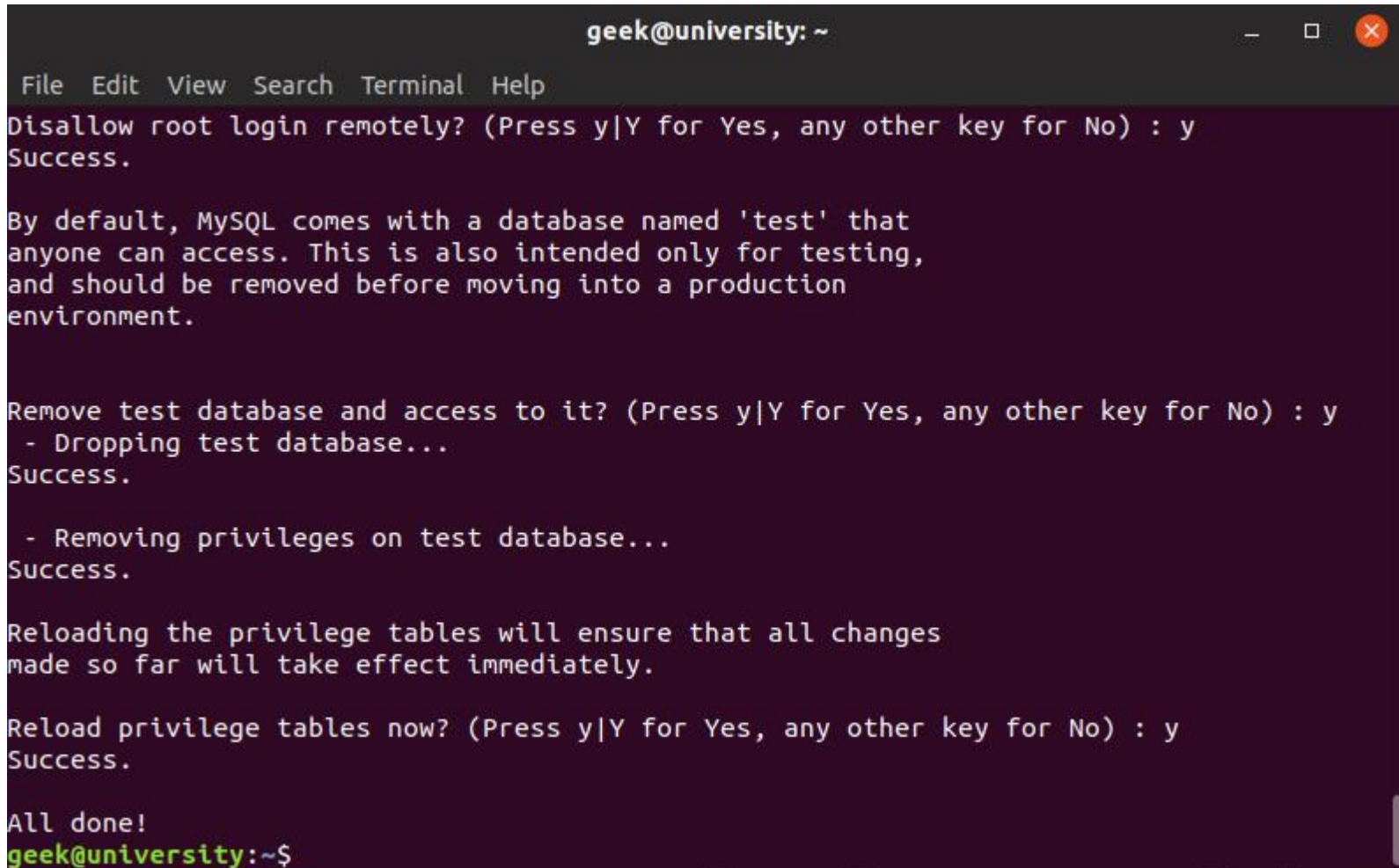
e) Recarregar a tabela de privilégios: `y`

A screenshot of a terminal window titled 'geek@university: ~'. The window has a menu bar with 'File', 'Edit', 'View', 'Search', 'Terminal', and 'Help'. The terminal output shows the following text:

```
ormally, root should only be allowed to connect from  
'localhost'. This ensures that someone cannot guess at  
the root password from the network.  
  
Disallow root login remotely? (Press y|Y for Yes, any other key for No) : y  
Success.  
  
By default, MySQL comes with a database named 'test' that  
anyone can access. This is also intended only for testing,  
and should be removed before moving into a production  
environment.  
  
Remove test database and access to it? (Press y|Y for Yes, any other key for No) : y  
- Dropping test database...  
Success.  
  
- Removing privileges on test database...  
Success.  
  
Reloading the privilege tables will ensure that all changes  
made so far will take effect immediately.  
  
Reload privilege tables now? (Press y|Y for Yes, any other key for No) : y
```

Instalação e Configuração no Linux

Configurações de segurança concluídas com sucesso.

A terminal window titled 'geek@university: ~' with a menu bar (File, Edit, View, Search, Terminal, Help). The terminal shows the following text:

```
Disallow root login remotely? (Press y|Y for Yes, any other key for No) : y
Success.

By default, MySQL comes with a database named 'test' that
anyone can access. This is also intended only for testing,
and should be removed before moving into a production
environment.

Remove test database and access to it? (Press y|Y for Yes, any other key for No) : y
- Dropping test database...
Success.

- Removing privileges on test database...
Success.

Reloading the privilege tables will ensure that all changes
made so far will take effect immediately.

Reload privilege tables now? (Press y|Y for Yes, any other key for No) : y
Success.

All done!
geek@university:~$
```


Instalação e Configuração no Linux

Console do MySQL

Instalação e Configuração no Linux

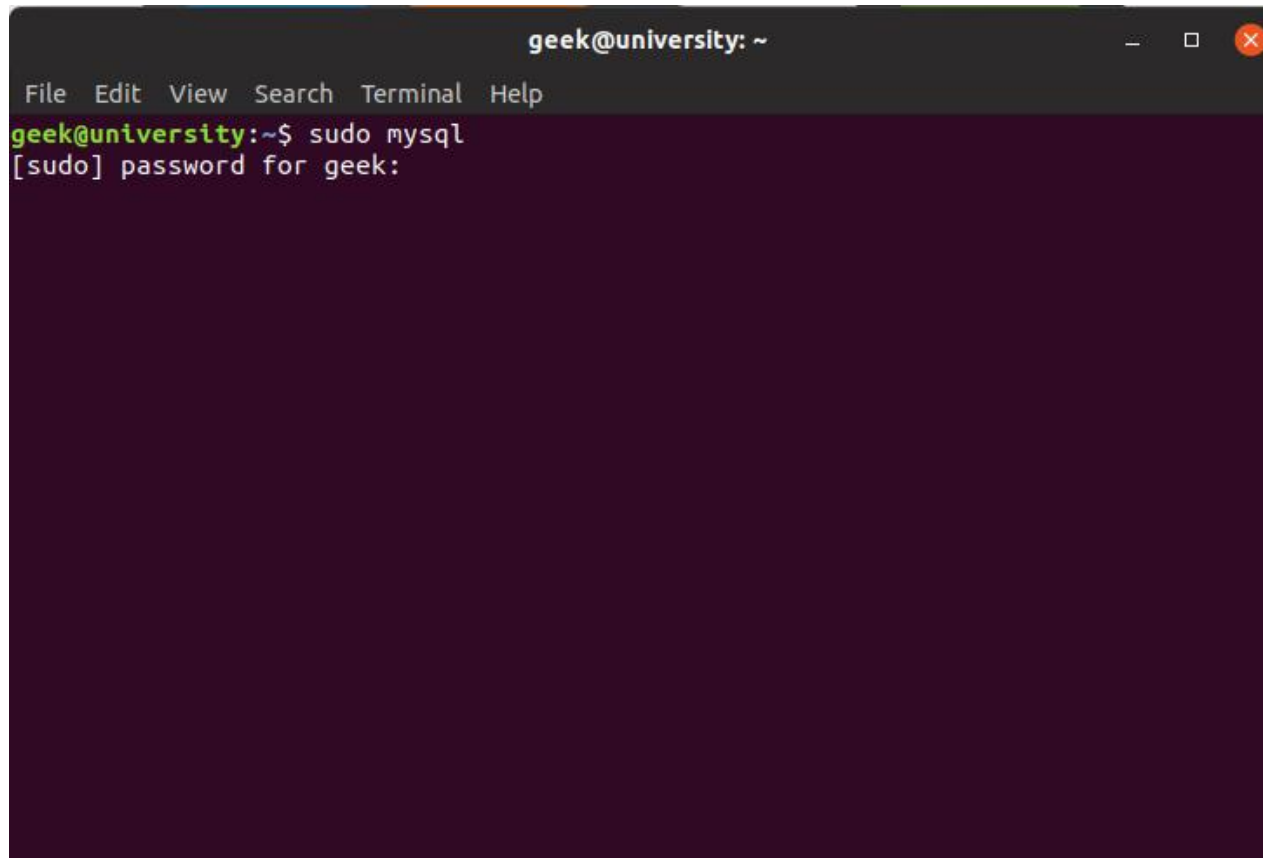
Console do MySQL

Por padrão, ao instalarmos o servidor de dados MySQL, não temos um cliente com interface gráfica para fazer o acesso e gerenciamento do servidor. Por outro lado, já durante a instalação ganhamos um cliente via console e é sempre útil saber como realizar acesso utilizando este cliente,

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Acessando o servidor MySQL via cliente console:

sudo mysql



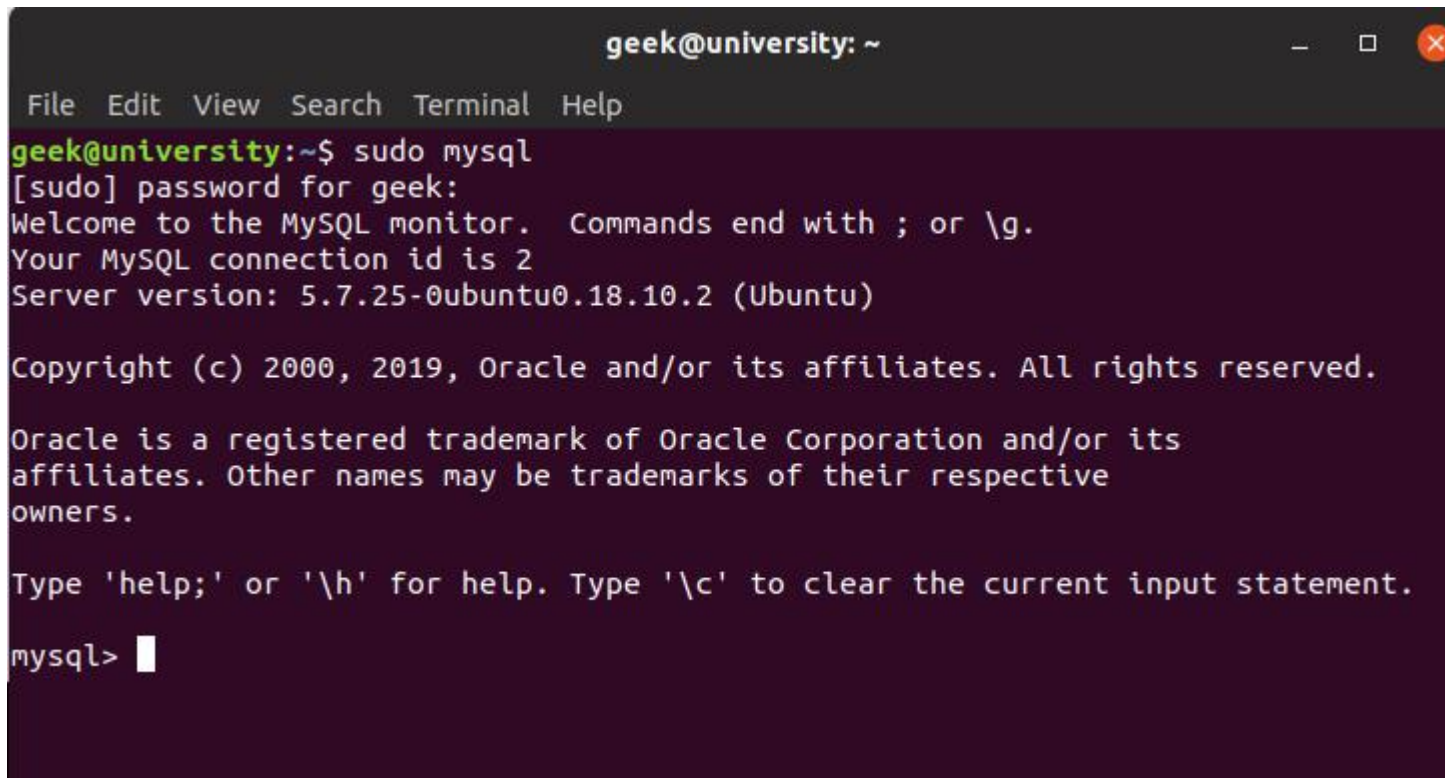
```
geek@university: ~  
File Edit View Search Terminal Help  
geek@university:~$ sudo mysql  
[sudo] password for geek:
```

Se a seção do terminal for nova, ou seja, se você não executou nenhum comando como sudo antes, será solicitado a senha de 'sudo' do usuário.

Ou seja, é a mesma senha do usuário do sistema.

Instalação e Configuração no Linux

Tendo acessado com sucesso você estará neste momento conectado ao servidor MySQL através deste cliente console. Note que mesmo que você não saiba o que fazer, o próprio console diz que você pode por exemplo digitar o comando 'help'.

A screenshot of a terminal window titled 'geek@university: ~'. The window has a menu bar with 'File', 'Edit', 'View', 'Search', 'Terminal', and 'Help'. The terminal shows the command 'sudo mysql' being executed. It prompts for a password, then displays a welcome message for the MySQL monitor, including the connection ID (2) and server version (5.7.25-0ubuntu0.18.10.2). It also shows copyright information and instructions on how to use help and clear the input. The prompt 'mysql>' is visible at the bottom with a cursor.

```
geek@university: ~
File Edit View Search Terminal Help
geek@university:~$ sudo mysql
[sudo] password for geek:
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 2
Server version: 5.7.25-0ubuntu0.18.10.2 (Ubuntu)

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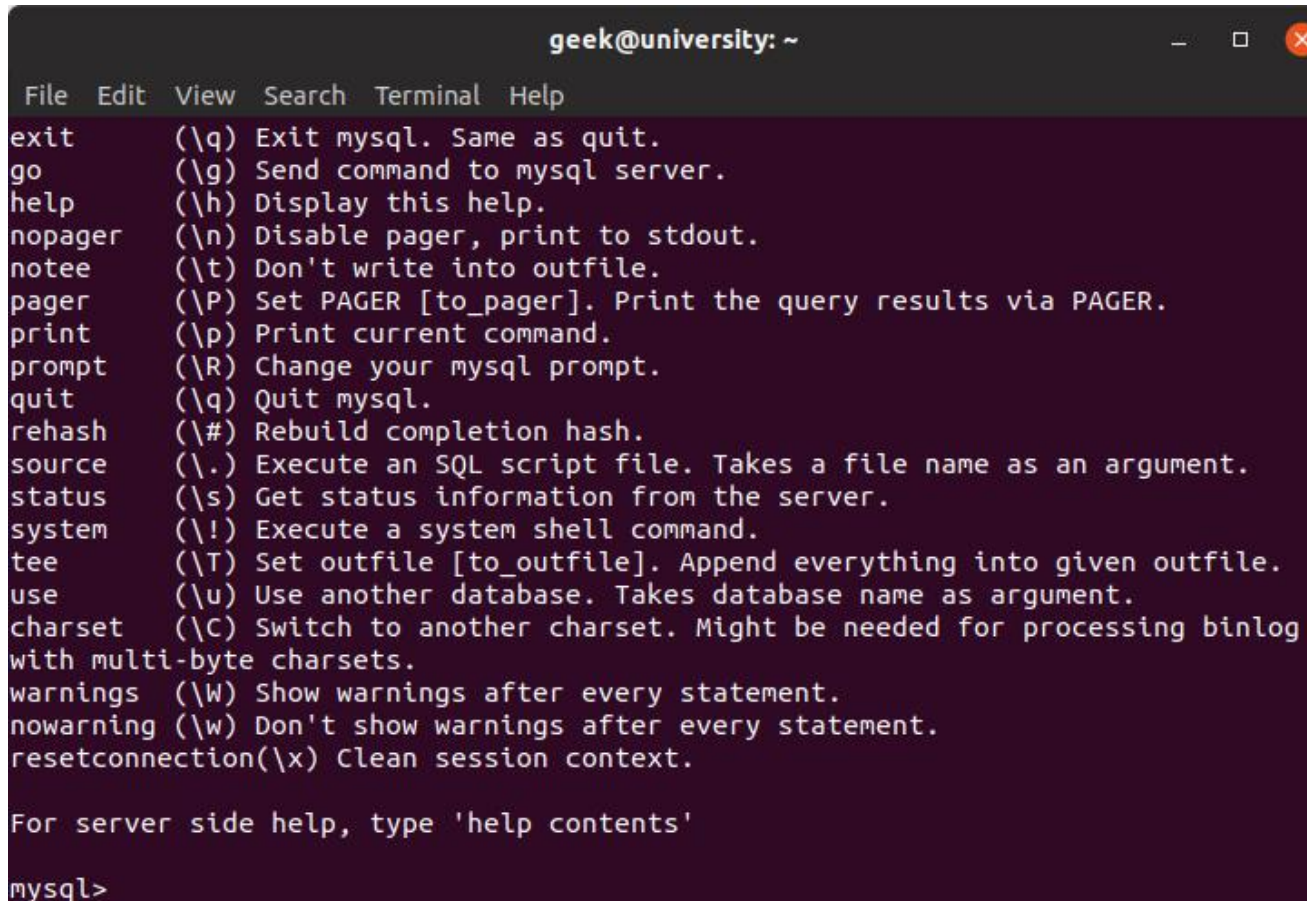
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owners.

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

mysql> █
```

Instalação e Configuração no Linux

Ao digitar 'help' e pressionar 'enter' será apresentada uma lista de possíveis comandos a serem executados no console.

A screenshot of a terminal window titled 'geek@university: ~'. The window has a menu bar with 'File', 'Edit', 'View', 'Search', 'Terminal', and 'Help'. The terminal displays the output of the 'help' command in MySQL, listing various commands and their functions. The list includes: exit (\q) Exit mysql. Same as quit.; go (\g) Send command to mysql server.; help (\h) Display this help.; nopager (\n) Disable pager, print to stdout.; notee (\t) Don't write into outfile.; pager (\P) Set PAGER [to_pager]. Print the query results via PAGER.; print (\p) Print current command.; prompt (\R) Change your mysql prompt.; quit (\q) Quit mysql.; rehash (\#) Rebuild completion hash.; source (\.) Execute an SQL script file. Takes a file name as an argument.; status (\s) Get status information from the server.; system (\!) Execute a system shell command.; tee (\T) Set outfile [to_outfile]. Append everything into given outfile.; use (\u) Use another database. Takes database name as argument.; charset (\C) Switch to another charset. Might be needed for processing binlog with multi-byte charsets.; warnings (\W) Show warnings after every statement.; nowarning (\w) Don't show warnings after every statement.; resetconnection(\x) Clean session context.; At the bottom, it says 'For server side help, type 'help contents'' and the prompt 'mysql>' is visible.

```
geek@university: ~
File Edit View Search Terminal Help
exit      (\q) Exit mysql. Same as quit.
go        (\g) Send command to mysql server.
help      (\h) Display this help.
nopager   (\n) Disable pager, print to stdout.
notee     (\t) Don't write into outfile.
pager     (\P) Set PAGER [to_pager]. Print the query results via PAGER.
print     (\p) Print current command.
prompt    (\R) Change your mysql prompt.
quit      (\q) Quit mysql.
rehash    (\#) Rebuild completion hash.
source    (\.) Execute an SQL script file. Takes a file name as an argument.
status    (\s) Get status information from the server.
system    (\!) Execute a system shell command.
tee       (\T) Set outfile [to_outfile]. Append everything into given outfile.
use       (\u) Use another database. Takes database name as argument.
charset   (\C) Switch to another charset. Might be needed for processing binlog
with multi-byte charsets.
warnings  (\W) Show warnings after every statement.
nowarning (\w) Don't show warnings after every statement.
resetconnection(\x) Clean session context.

For server side help, type 'help contents'

mysql>
```

Instalação e Configuração no Linux

Nós fizemos o acesso ao servidor MySQL utilizando o usuário administrador do servidor 'root'.

Nunca devemos utilizar o usuário 'root' para trabalhar diretamente com bancos de dados. O ideal é sempre criar um usuário para que possamos utilizar.

Instalação e Configuração no Linux

Criando um novo usuário para o banco de dados:

Instalação e Configuração no Linux

Criando um novo usuário para o banco de dados:

Atenção: Nesta etapa temos duas opções:

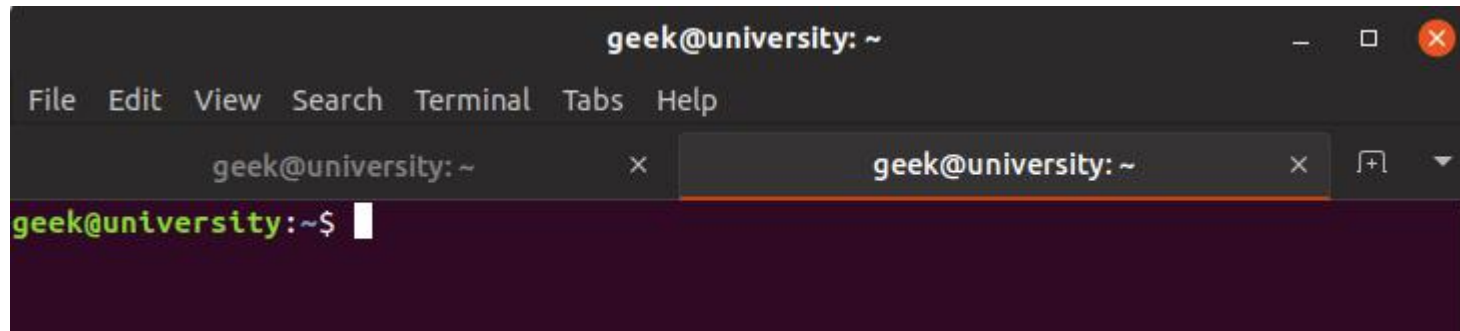
- 1) Você quer criar um usuário no banco de dados com o mesmo nome do usuário do sistema;
- 2) Você quer criar um novo usuário para algum projeto em específico ou com um nome diferente do nome de usuário do sistema;

Instalação e Configuração no Linux

Criando um novo usuário para o banco de dados:

Atenção: Nesta etapa temos duas opções:

- 1) Você quer criar um usuário no banco de dados com o mesmo nome do usuário do sistema;
- 2) Você quer criar um novo usuário para algum projeto em específico ou com um nome diferente do nome de usuário do sistema;



Note que o meu nome de usuário no sistema é 'geek' e se eu quiser criar um usuário no banco de dados com este mesmo nome eu sigo a opção 1. Se você tiver um nome de usuário válido (sem espaços, sem caracteres especiais, sem acentuação) você poderá fazer o mesmo.

Instalação e Configuração no Linux

Criando um novo usuário para o banco de dados:

Caso você tenha um nome de usuário inválido ('geek university', 'dragão', '@tavio', etc) ou mesmo quiser criar usuários para trabalhar em um projeto qualquer, você deve seguir a opção 2.

Instalação e Configuração no Linux

Criando um novo usuário para o banco de dados:

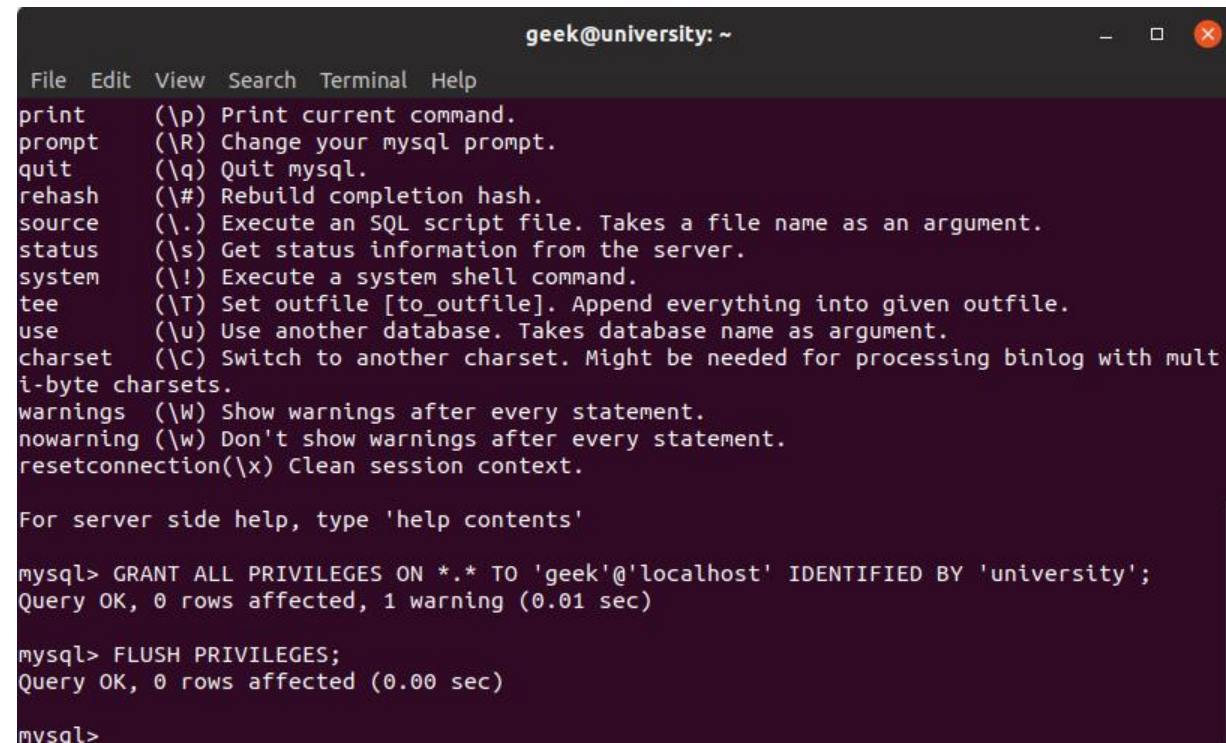
Opção 1: Criar um usuário no banco de dados com o mesmo nome de usuário (válido) do sistema operacional.

*GRANT ALL PRIVILEGES ON *.* TO 'geek'@'localhost' IDENTIFIED BY 'university';*

FLUSH PRIVILEGES;

. indica que estamos dando permissão total de acesso ao usuário 'geek' identificado com a senha 'university' a qualquer banco de dados e qualquer tabela.

Caso quiséssemos especificar um banco de dados poderíamos substituir por `banco_de_dados.*` ou ainda especificar uma tabela `banco_de_dados.tabela`



```
geek@university: ~  
File Edit View Search Terminal Help  
print (\p) Print current command.  
prompt (\R) Change your mysql prompt.  
quit (\q) Quit mysql.  
rehash (\#) Rebuild completion hash.  
source (\.) Execute an SQL script file. Takes a file name as an argument.  
status (\s) Get status information from the server.  
system (\!) Execute a system shell command.  
tee (\T) Set outfile [to_outfile]. Append everything into given outfile.  
use (\u) Use another database. Takes database name as argument.  
charset (\c) Switch to another charset. Might be needed for processing binlog with mult  
i-byte charsets.  
warnings (\W) Show warnings after every statement.  
nowarning (\w) Don't show warnings after every statement.  
resetconnection(\x) Clean session context.  
  
For server side help, type 'help contents'  
  
mysql> GRANT ALL PRIVILEGES ON *.* TO 'geek'@'localhost' IDENTIFIED BY 'university';  
Query OK, 0 rows affected, 1 warning (0.01 sec)  
  
mysql> FLUSH PRIVILEGES;  
Query OK, 0 rows affected (0.00 sec)  
  
mysql>
```

Instalação e Configuração no Linux

Criando um novo usuário para o banco de dados:

Opção 2: Criar um novo usuário no banco de dados diferente do nome de usuário do sistema.

CREATE USER 'maria'@'localhost' IDENTIFIED BY 'joaquina';

*GRANT ALL PRIVILEGES ON *.* TO 'maria'@'localhost' WITH GRANT OPTION;*

FLUSH PRIVILEGES;

Veja que agora estamos primeiramente criando o usuário 'maria' identificada pela senha 'joaquina' e após isso dando privilégios de acesso a qualquer banco de dados em qualquer tabela.

```
mysql> CREATE USER 'maria'@'localhost' IDENTIFIED BY 'joaquina';
Query OK, 0 rows affected (0.00 sec)

mysql> GRANT ALL PRIVILEGES ON *.* TO 'maria'@'localhost' WITH GRANT OPTION;
Query OK, 0 rows affected (0.00 sec)

mysql> FLUSH PRIVILEGES;
Query OK, 0 rows affected (0.00 sec)

mysql> 
```

* Iremos utilizar o usuário 'geek' nas aulas, mas você pode utilizar qualquer outro.

Instalação e Configuração no Linux

Logando no console do MySQL com outro usuário (não root)

Instalação e Configuração no Linux

Logando no console do MySQL com outro usuário (não root)

Se você estiver ainda logado com o usuário 'root', saia do sistema com o comando:

exit;

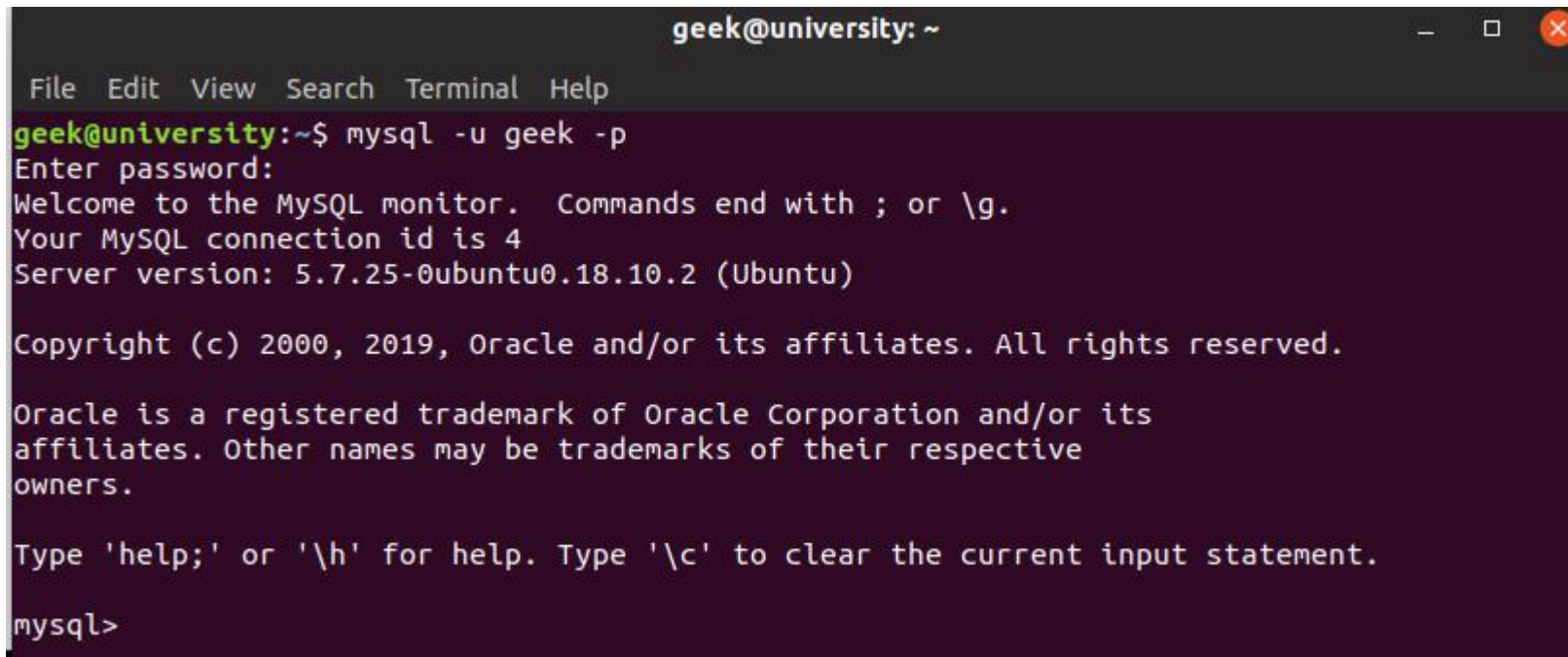
```
mysql> FLUSH PRIVILEGES;  
Query OK, 0 rows affected (0.00 sec)  
  
mysql> exit;  
Bye  
geek@university:~$
```

Instalação e Configuração no Linux

Logando no console do MySQL com outro usuário (não root)

Faça novo acesso via terminal com o comando:

mysql -u geek -p



```
geek@university: ~  
File Edit View Search Terminal Help  
geek@university:~$ mysql -u geek -p  
Enter password:  
Welcome to the MySQL monitor.  Commands end with ; or \g.  
Your MySQL connection id is 4  
Server version: 5.7.25-0ubuntu0.18.10.2 (Ubuntu)  
  
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owners.  
  
Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.  
mysql>
```

Aqui, se você estiver utilizando um usuário diferente de 'geek', basta substituir a palavra 'geek' pelo seu usuário.

Não se esqueça de informar a senha do usuário que foi informada na criação do mesmo.

Veja que o console do MySQL é o mesmo de antes.

Instalação e Configuração no Linux

Comandos SQL de exemplo:

Instalação e Configuração no Linux

Comandos SQL de exemplo:

a) Para listar todos os bancos de dados criados no servidor

SHOW DATABASES;

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

mysql> SHOW DATABASES;
+-----+
| Database |
+-----+
| information_schema |
| mysql |
| performance_schema |
| sys |
+-----+
4 rows in set (0.01 sec)

mysql>
```

Note que temos no momento 4 banco de dados.

A partir do momento que sabemos o nome dos banco de dados, podemos utilizar qualquer um deles.

Instalação e Configuração no Linux

Comandos SQL de exemplo:

b) Usando um banco de dados

USE sys;

```
mysql> USE sys;  
Reading table information for completion of table and column names  
You can turn off this feature to get a quicker startup with -A  
  
Database changed  
mysql>
```

Note que temos uma mensagem de que o banco de dados foi alterado, ou seja, agora estamos utilizando um outro banco de dados, diferente de quando fizemos o acesso.

Estando usando um banco de dados, podemos verificar suas tabelas.

Instalação e Configuração no Linux

Comandos SQL de exemplo:

c) Mostrar as tabelas do banco de dados em utilização

SHOW TABLES;

```
| x$user_summary  
| x$user_summary_by_file_io  
| x$user_summary_by_file_io_type  
| x$user_summary_by_stages  
| x$user_summary_by_statement_latency  
| x$user_summary_by_statement_type  
| x$wait_classes_global_by_avg_latency  
| x$wait_classes_global_by_latency  
| x$waits_by_host_by_latency  
| x$waits_by_user_by_latency  
| x$waits_global_by_latency  
+-----+  
101 rows in set (0.00 sec)  
  
mysql>
```

Note que temos 101 tabelas neste banco de dados.

Conhecendo as tabelas, podemos fazer qualquer operação SQL, por exemplo, consultar dados.

Instalação e Configuração no Linux

Comandos SQL de exemplo:

d) Consultando dados de uma tabela

*SELECT * FROM version;*

```
mysql> SELECT * FROM version;
+-----+-----+
| sys_version | mysql_version |
+-----+-----+
| 1.5.1       | 5.7.25-0ubuntu0.18.10.2 |
+-----+-----+
1 row in set (0.00 sec)

mysql>
```

Note que temos 1
resultado nesta consulta.

Instalação e Configuração no Linux

Comandos SQL de exemplo:

e) Para deslogar do servidor

`\q;`

```
mysql> \q;  
Bye  
geek@university:~$
```

OBS: Já vimos que também podemos deslogar do servidor com o comando 'exit'.



Geek University

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