

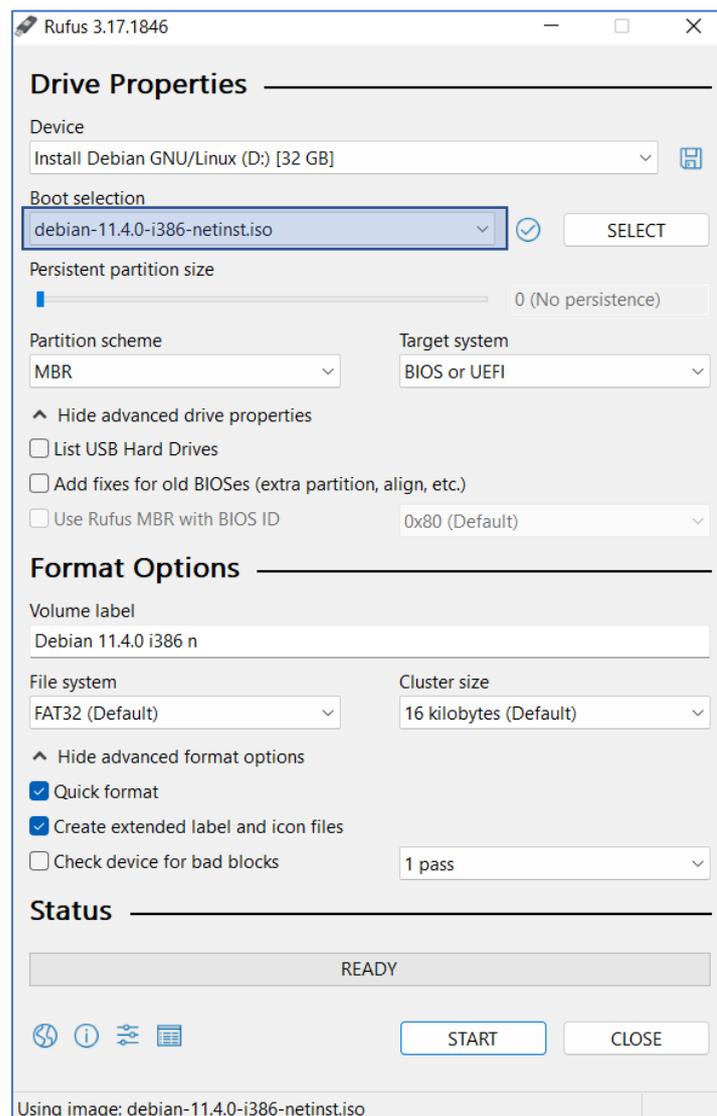
EBOX Mini PC Debian 11 & MySQL (MariaDB) installation guide

Preparation:

1. EBOX Mini PC 1 pcs
2. Download 32-bit Image [debian-11.4.0-i386-netinst.iso](https://cdimage.debian.org/debian-cd/current/i386/iso-cd/) for EBOX Vortex86DX3 Series from <https://cdimage.debian.org/debian-cd/current/i386/iso-cd/>
Download 64-bit Image [debian-11.4.0-amd64-netinst.iso](https://cdimage.debian.org/debian-cd/current/amd64/iso-cd/) for EBOX Intel Braswell Series from <https://cdimage.debian.org/debian-cd/current/amd64/iso-cd/>
3. Download tool Rufus from <https://rufus.ie/en/>

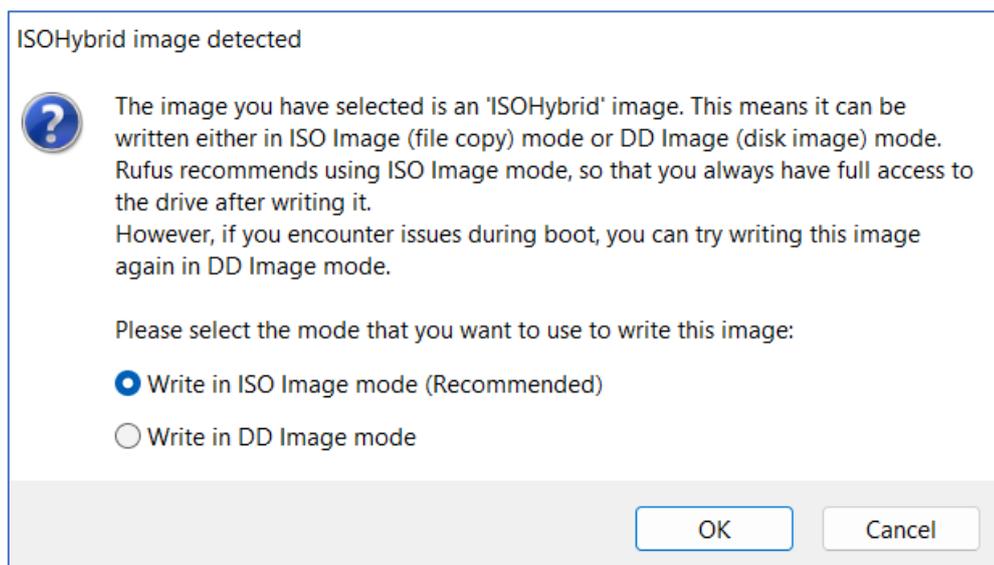
Use tool Rufus to create Debian 11 installer:

- A. Execute Rufus
- B. Connect USB drive to PC
- C. Select Boot selection as corresponding debian-11.4.0-netinst.iso Image

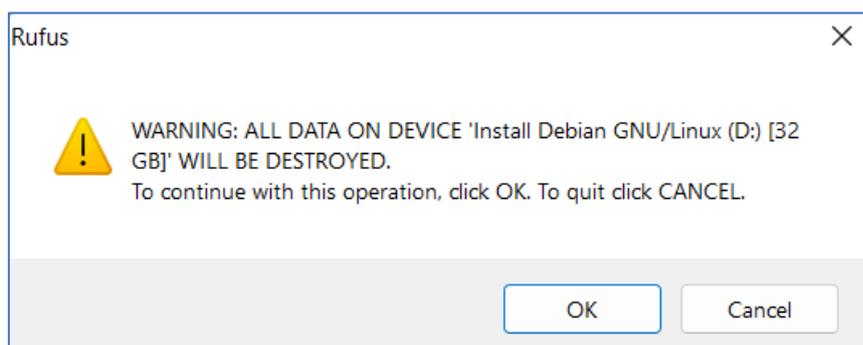


- D. Click start

E. ISOHybrid image detected, select Write in ISO Image mode and click OK.



F. A warning message appear, click OK to continue with this operation.

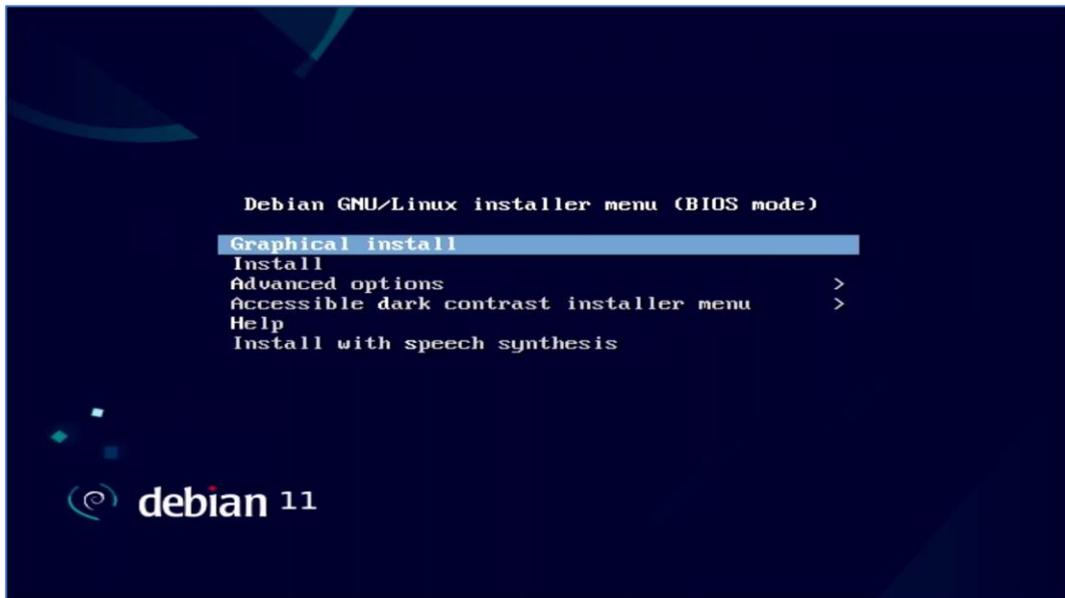


G. Remove USB drive after Debian 11 installer created.

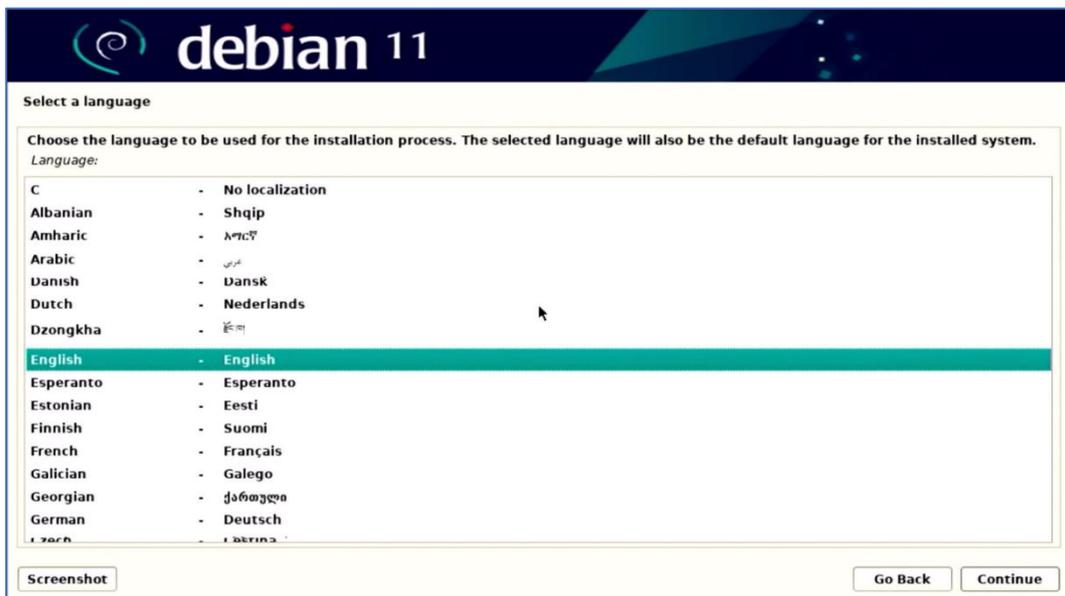
Debian 11 installation:

Boot up EBOX with Debian 11 installer and connect to internet, follow below steps:

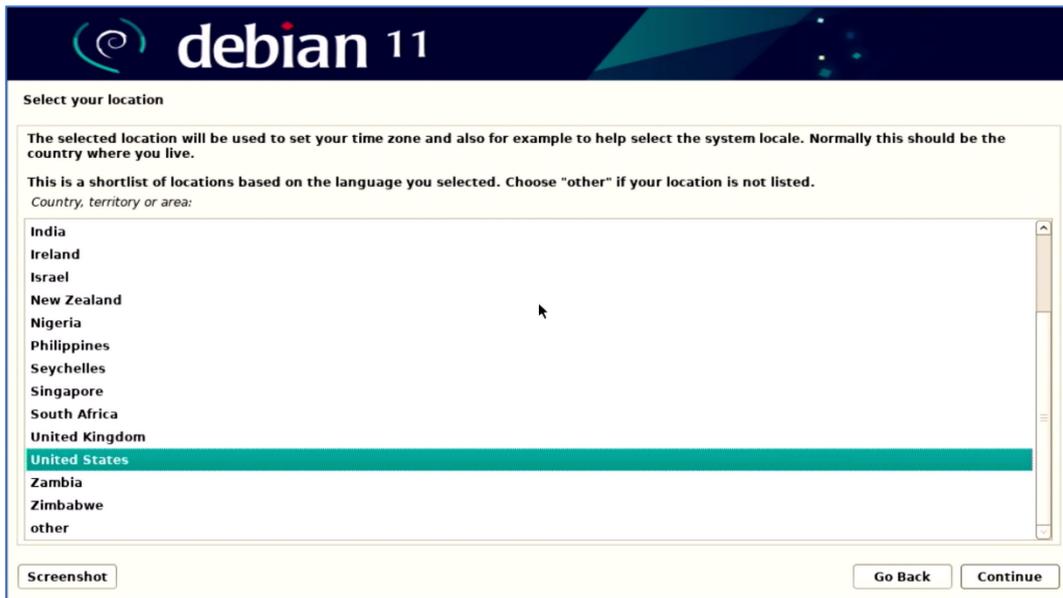
A. Select Graphical Install.



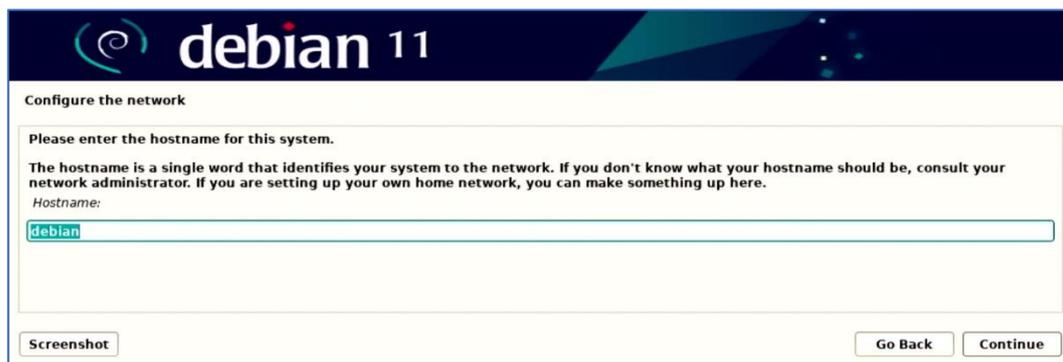
B. Select a language.



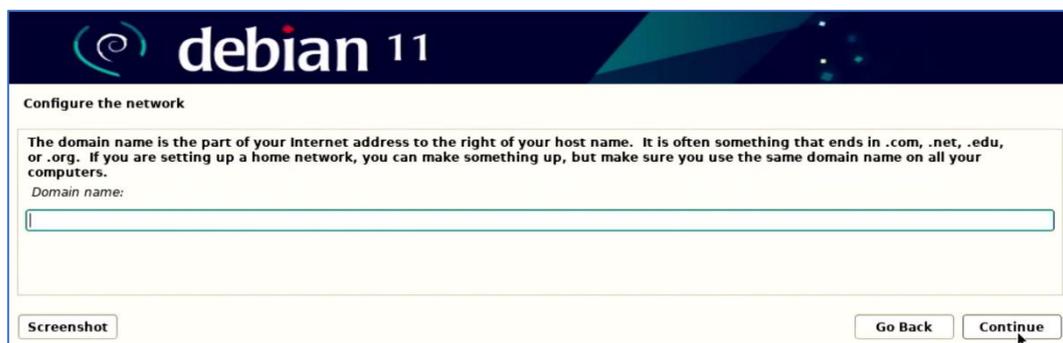
C. Select your location and click continue.



D. Set debian as Hostname.



E. Click continue and skip domain name.

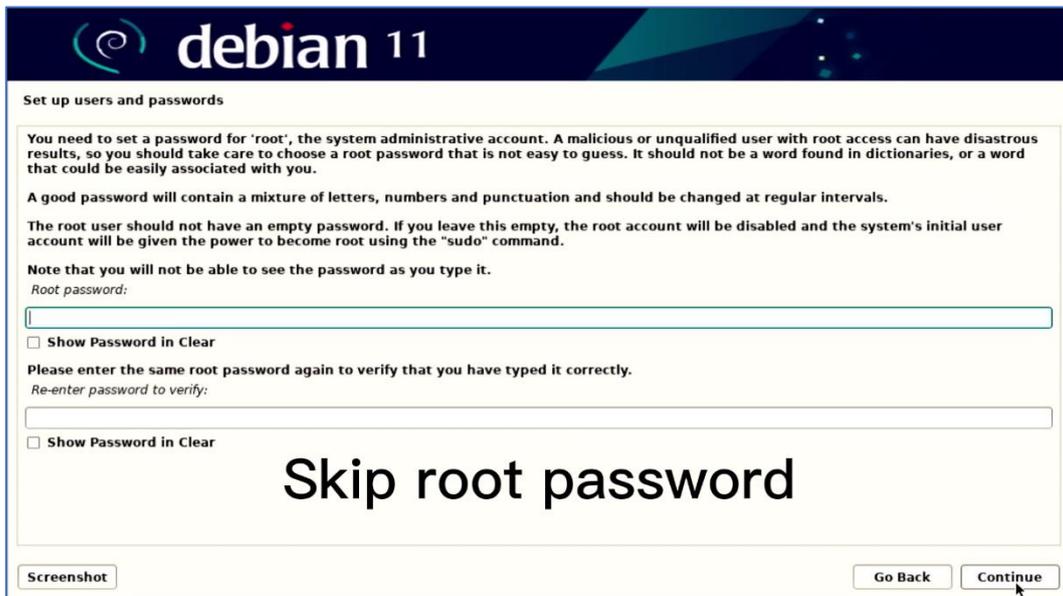


F. Set up user name.



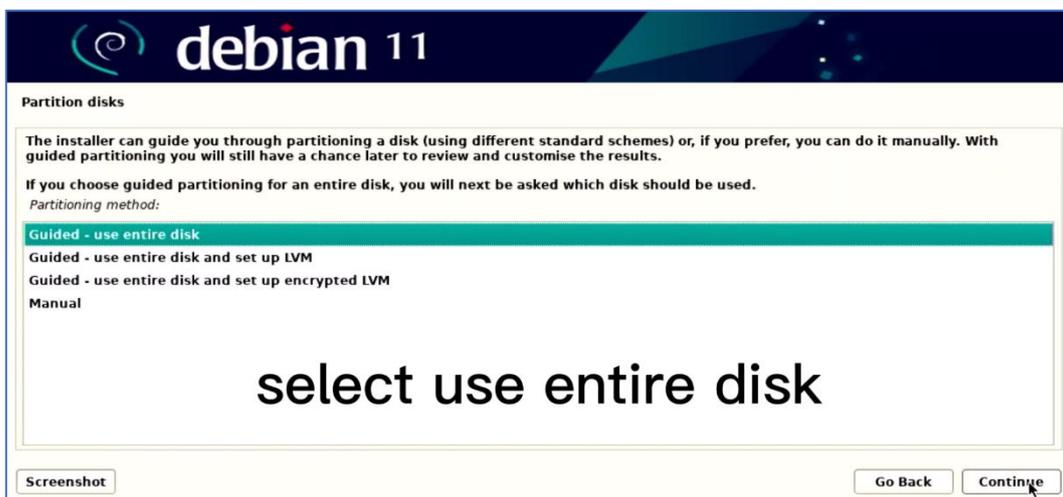
The screenshot shows the 'Set up users and passwords' screen in the Debian 11 installer. The title bar at the top features the Debian logo and 'debian 11'. Below the title, the section is titled 'Set up users and passwords'. The main text reads: 'Select a username for the new account. Your first name is a reasonable choice. The username should start with a lower-case letter, which can be followed by any combination of numbers and more lower-case letters.' Below this, it says 'Username for your account:' followed by a text input field containing 'dmp'. The large text 'Set up user name' is centered on the screen. At the bottom, there are buttons for 'Screenshot', 'Go Back', and 'Continue'.

G. Click continue and skip root and password.



The screenshot shows the 'Set up users and passwords' screen in the Debian 11 installer. The title bar at the top features the Debian logo and 'debian 11'. Below the title, the section is titled 'Set up users and passwords'. The main text reads: 'You need to set a password for "root", the system administrative account. A malicious or unqualified user with root access can have disastrous results, so you should take care to choose a root password that is not easy to guess. It should not be a word found in dictionaries, or a word that could be easily associated with you. A good password will contain a mixture of letters, numbers and punctuation and should be changed at regular intervals. The root user should not have an empty password. If you leave this empty, the root account will be disabled and the system's initial user account will be given the power to become root using the "sudo" command. Note that you will not be able to see the password as you type it.' Below this, it says 'Root password:' followed by a text input field. There are checkboxes for 'Show Password in Clear' and 'Please enter the same root password again to verify that you have typed it correctly.' Below this, it says 'Re-enter password to verify:' followed by another text input field. The large text 'Skip root password' is centered on the screen. At the bottom, there are buttons for 'Screenshot', 'Go Back', and 'Continue'.

H. Select use entire disk.

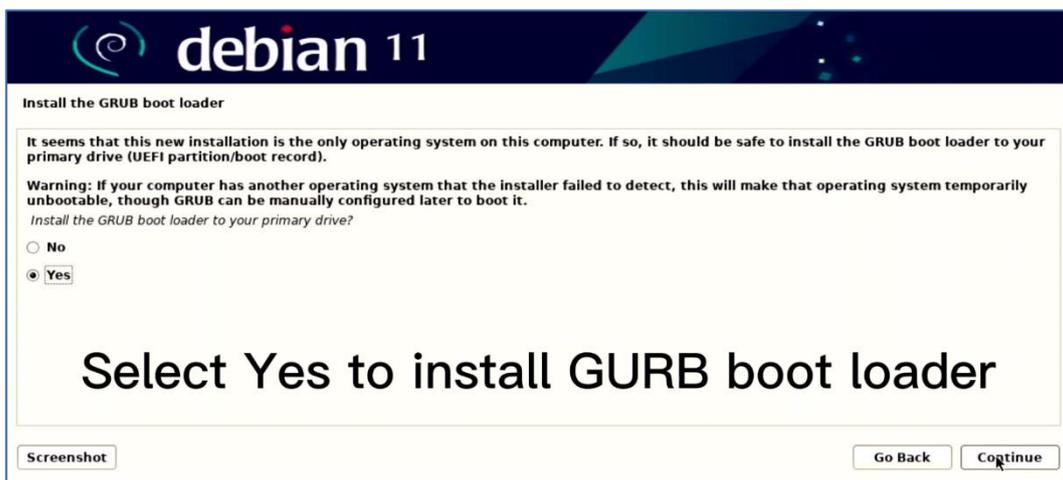


The screenshot shows the 'Partition disks' screen in the Debian 11 installer. The title bar at the top features the Debian logo and 'debian 11'. Below the title, the section is titled 'Partition disks'. The main text reads: 'The installer can guide you through partitioning a disk (using different standard schemes) or, if you prefer, you can do it manually. With guided partitioning you will still have a chance later to review and customise the results. If you choose guided partitioning for an entire disk, you will next be asked which disk should be used.' Below this, it says 'Partitioning method:' followed by a list of options: 'Guided - use entire disk', 'Guided - use entire disk and set up LVM', 'Guided - use entire disk and set up encrypted LVM', and 'Manual'. The 'Guided - use entire disk' option is highlighted in green. The large text 'select use entire disk' is centered on the screen. At the bottom, there are buttons for 'Screenshot', 'Go Back', and 'Continue'.

I. Select the storage to install.



J. Select Yes and click continue to install GURB boot loader.

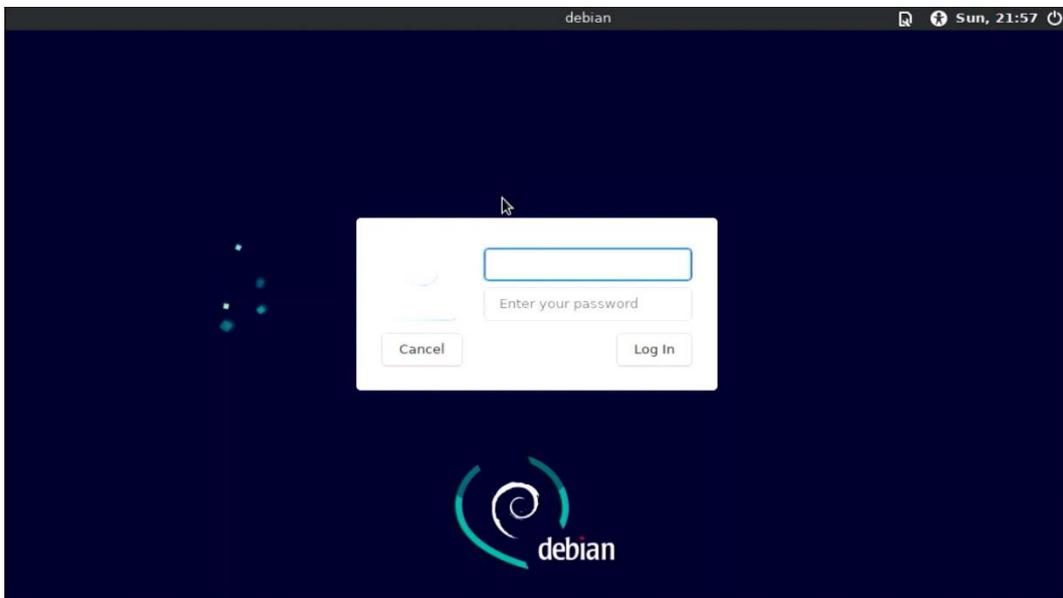


Debian 11 installation completed!

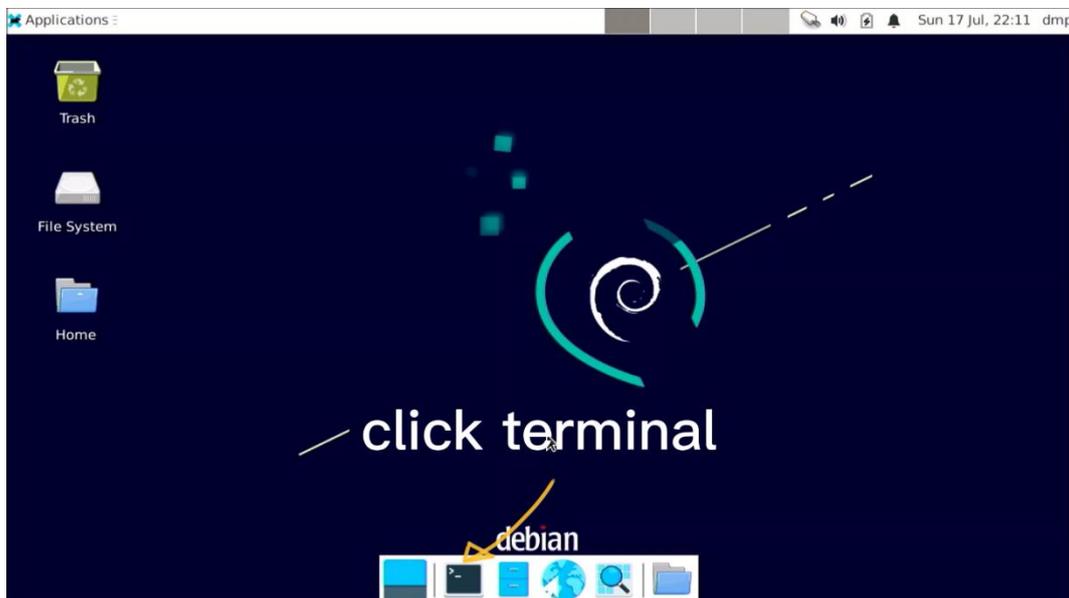


MySQL (MariaDB) installation:

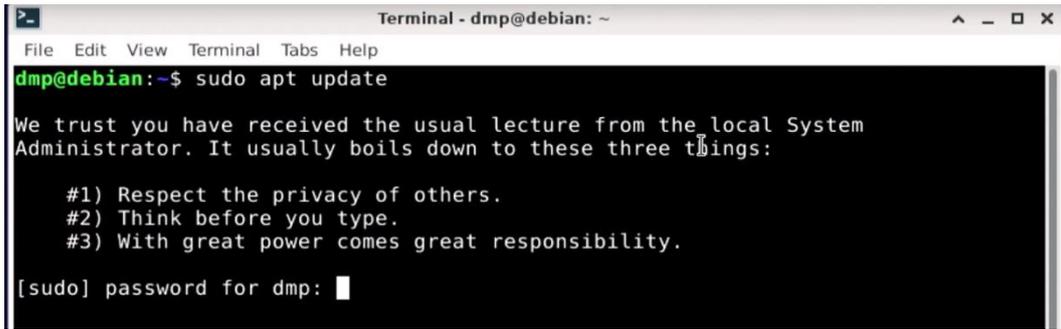
Reboot EBOX, enter user's name and password to enter Debian 11, follow below steps:



A. Click terminal.



B. Execute: `sudo apt update`, and input password.



```
Terminal - dmp@debian: ~
File Edit View Terminal Tabs Help
dmp@debian:~$ sudo apt update

We trust you have received the usual lecture from the local System
Administrator. It usually boils down to these three things:

 #1) Respect the privacy of others.
 #2) Think before you type.
 #3) With great power comes great responsibility.

[sudo] password for dmp: █
```

C. Execute: `sudo apt install mariadb-server`.



```
Terminal - dmp@debian: ~
File Edit View Terminal Tabs Help
dmp@debian:~$ sudo apt update

We trust you have received the usual lecture from the local System
Administrator. It usually boils down to these three things:

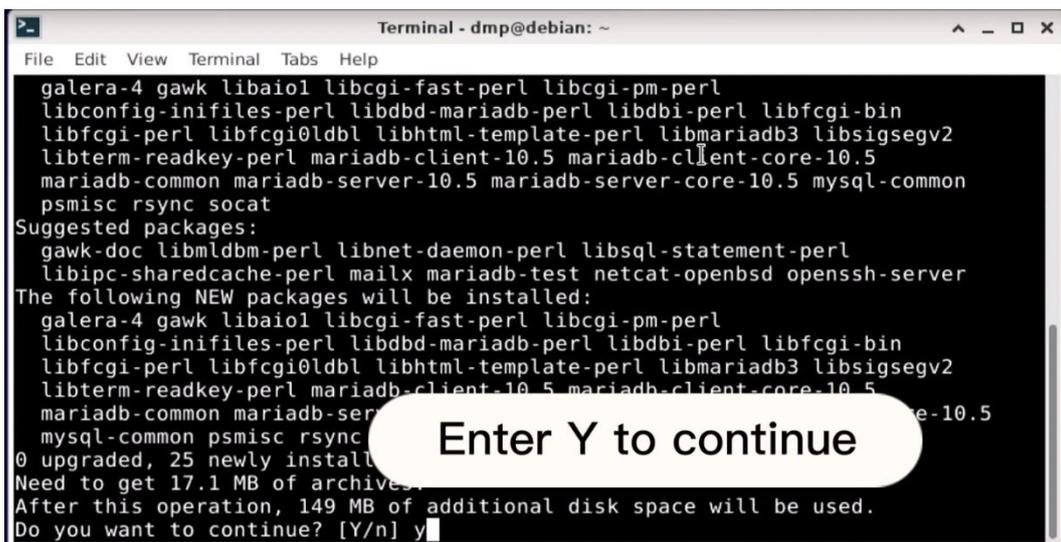
 #1) Respect the privacy of others.
 #2) Think before you type.
 #3) With great power comes great responsibility.

[sudo] password for dmp: █
Hit:1 InetGet: http://deb.debian.org/debian InRelease [4096 B]
Hit:2 InetGet: http://deb.debian.org/debian InRelease [4096 B]
Hit:3 InetGet: http://deb.debian.org/debian InRelease [4096 B]
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
All packages are up to date.
dmp@debian:~$ sudo apt install mariadb-server

```

**execute:
sudo apt install mariadb-server**

D. Enter Y to continue.



```
Terminal - dmp@debian: ~
File Edit View Terminal Tabs Help
galera-4 gawk libaiol libcgi-fast-perl libcgi-pm-perl
libconfig-inifiles-perl libdbd-mariadb-perl libdbi-perl libfcgi-bin
libfcgi-perl libfcgi0ldbl libhtml-template-perl libmariadb3 libsigsegv2
libterm-readkey-perl mariadb-client-10.5 mariadb-client-core-10.5
mariadb-common mariadb-server-10.5 mariadb-server-core-10.5 mysql-common
psmisc rsync socat
Suggested packages:
gawk-doc libltdb-perl libnet-daemon-perl libsql-statement-perl
libipc-sharedcache-perl mailx mariadb-test netcat-openbsd openssl-server
The following NEW packages will be installed:
galera-4 gawk libaiol libcgi-fast-perl libcgi-pm-perl
libconfig-inifiles-perl libdbd-mariadb-perl libdbi-perl libfcgi-bin
libfcgi-perl libfcgi0ldbl libhtml-template-perl libmariadb3 libsigsegv2
libterm-readkey-perl mariadb-client-10.5 mariadb-client-core-10.5
mariadb-common mariadb-server-10.5 mariadb-server-core-10.5
mysql-common psmisc rsync socat
0 upgraded, 25 newly installed, 0 to remove and 0 not installed.
Need to get 17.1 MB of archives.
After this operation, 149 MB of additional disk space will be used.
Do you want to continue? [Y/n] y
```

Enter Y to continue

E. Execute `sudo mysql_secure_installation`.



```
Terminal - dmp@debian: ~
File Edit View Terminal Tabs Help
Setting up libterm-readkey-perl (2.38-1+b2) ...
Setting up libaiol:i386 (0.3.112-9) ...
Setting up libdbi-perl:i386 (1.643-3+b1) ...
Setting up rsync (3.2.3-4+deb11u1) ...
Created symlink /etc/systemd/system/multi-user.target.wants/rsync.service → /lib/systemd/system/rsync.service.
Setting up mariadb-server-core-10.5 (1:10.5.15-0+deb11u1) ...
Setting up libcgi-fast-perl (1:2.15-1) ...
Setting up ...
Setting up ...
Setting up ...
Created symlink /etc/systemd/system/multi-user.target.wants/mariadb.service → /lib/systemd/system/mariadb.service.
Setting up mariadb-server (1:10.5.15-0+deb11u1) ...
Processing triggers for man-db (2.9.4-2) ...
Processing triggers for libc-bin (2.31-13+deb11u3) ...
dmp@debian:~$ sudo mysql_secure_installation
```

execute:
sudo mysql_secure_installation

F. Click enter for none.



```
Terminal - dmp@debian: ~
File Edit View Terminal Tabs Help
Setting up libcgi-fast-perl (1:2.15-1) ...
Setting up libdbd-mariadb-perl (1.21-3) ...
Setting up mariadb-client-core-10.5 (1:10.5.15-0+deb11u1) ...
Setting up mariadb-client-10.5 (1:10.5.15-0+deb11u1) ...
Setting up mariadb-server-10.5 (1:10.5.15-0+deb11u1) ...
Created symlink /etc/systemd/system/multi-user.target.wants/mariadb.service → /lib/systemd/system/mariadb.service.
Setting up mariadb-server (1:10.5.15-0+deb11u1) ...
Processing triggers for man-db (2.9.4-2) ...
Processing triggers for libc-bin (2.31-13+deb11u3) ...
dmp@debian:~$ sudo mysql_secure_installation

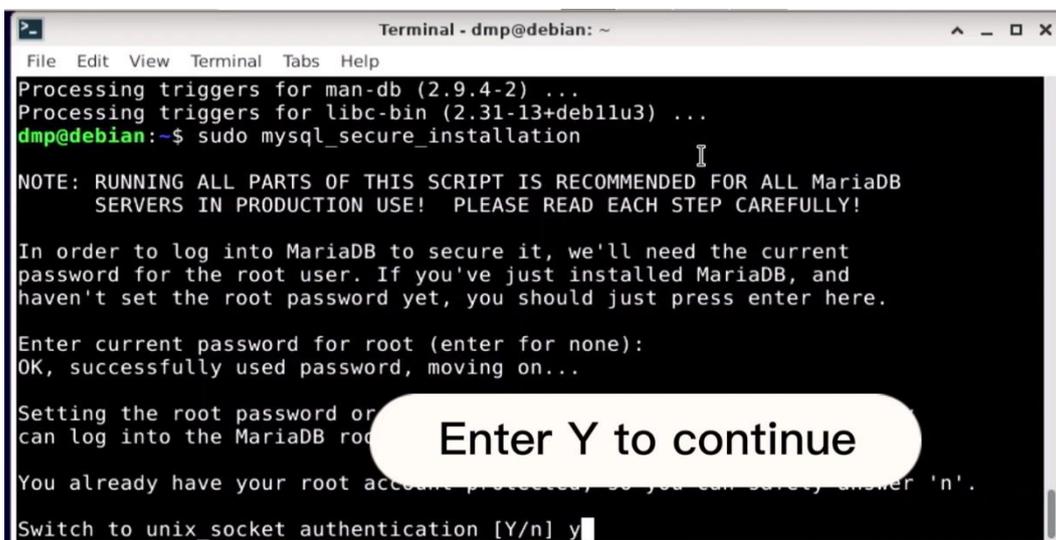
NOTE: RUNNING ALL PARTS OF THIS SCRIPT IS RECOMMENDED FOR ALL MariaDB
SERVERS IN PRODUCTION USE! PLEASE READ EACH STEP CAREFULLY!

In order to log into MariaDB to secure it, we'll need the current
password for the root user. If you've just installed MariaDB, and
haven't set the root password yet, you should just press enter here.

Enter current password for root (enter for none):
```

Enter for none

G. Enter Y to continue.



```
Terminal - dmp@debian: ~
File Edit View Terminal Tabs Help
Processing triggers for man-db (2.9.4-2) ...
Processing triggers for libc-bin (2.31-13+deb11u3) ...
dmp@debian:~$ sudo mysql_secure_installation

NOTE: RUNNING ALL PARTS OF THIS SCRIPT IS RECOMMENDED FOR ALL MariaDB
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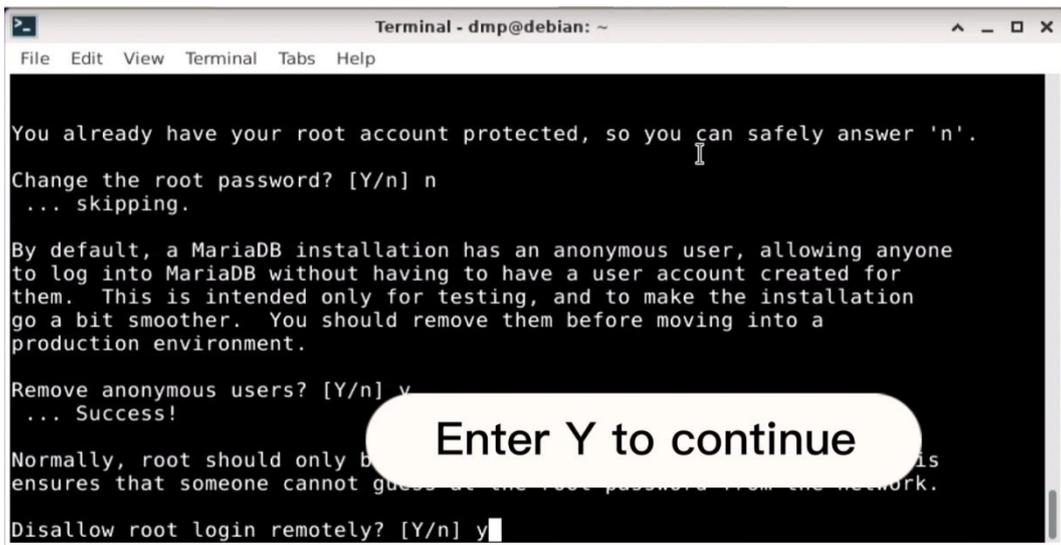
Enter current password for root (enter for none):
OK, successfully used password, moving on...

Setting the root password or you can log into the MariaDB root
You already have your root account protected, so you can safely answer 'n'.

Switch to unix socket authentication [Y/n] y
```

Enter Y to continue

H. Enter Y to continue.



```
Terminal - dmp@debian: ~
File Edit View Terminal Tabs Help

You already have your root account protected, so you can safely answer 'n'.
Change the root password? [Y/n] n
... skipping.

By default, a MariaDB installation has an anonymous user, allowing anyone
to log into MariaDB 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.

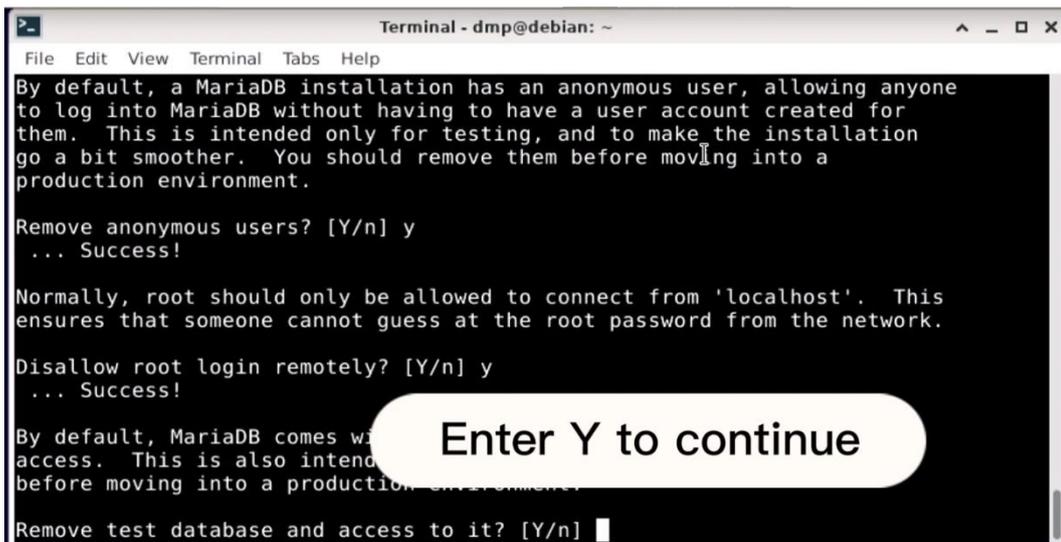
Remove anonymous users? [Y/n] y
... Success!

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? [Y/n] y
```

Enter Y to continue

I. Enter Y to continue.



```
Terminal - dmp@debian: ~
File Edit View Terminal Tabs Help

By default, a MariaDB installation has an anonymous user, allowing anyone
to log into MariaDB 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? [Y/n] 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.

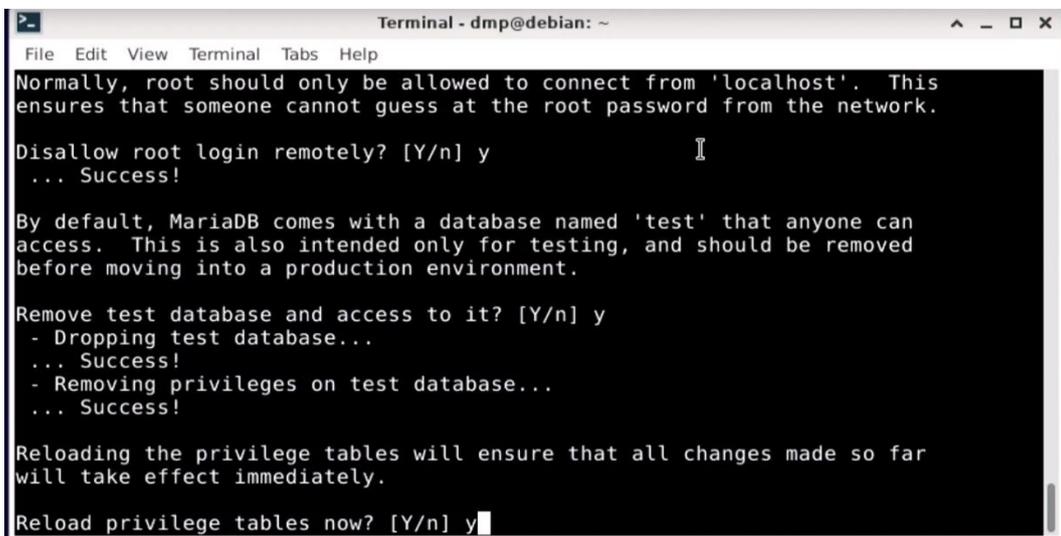
Disallow root login remotely? [Y/n] y
... Success!

By default, MariaDB 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? [Y/n]
```

Enter Y to continue

J. Enter Y to continue.



```
Terminal - dmp@debian: ~
File Edit View Terminal Tabs Help

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? [Y/n] y
... Success!

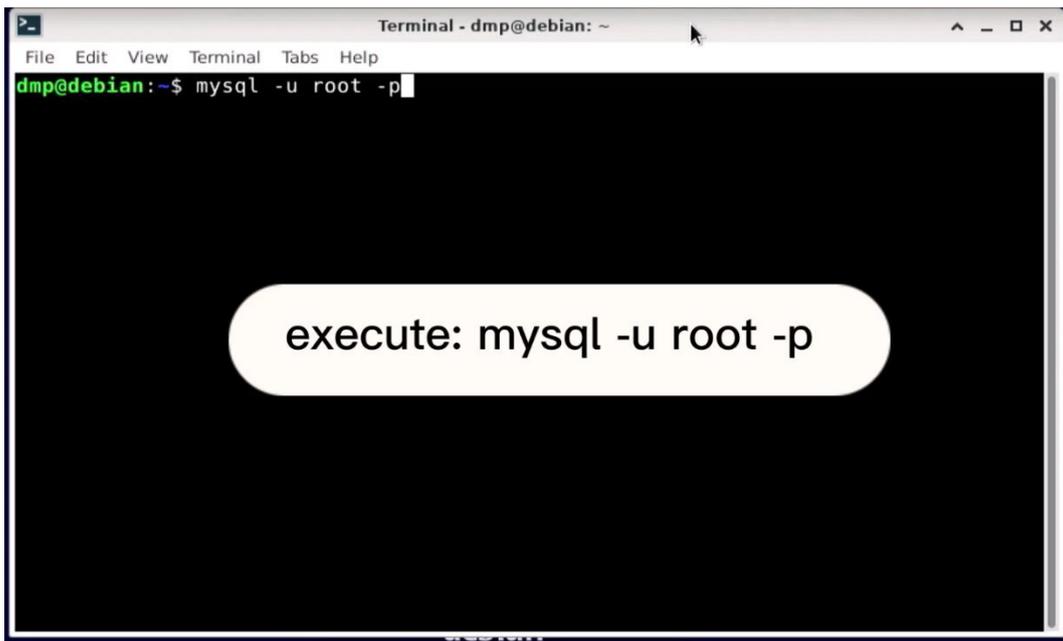
By default, MariaDB comes with a database named 'test' that anyone can
access. This is also intended only for testing, and should be removed
before moving into a production environment.

Remove test database and access to it? [Y/n] 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? [Y/n] y
```

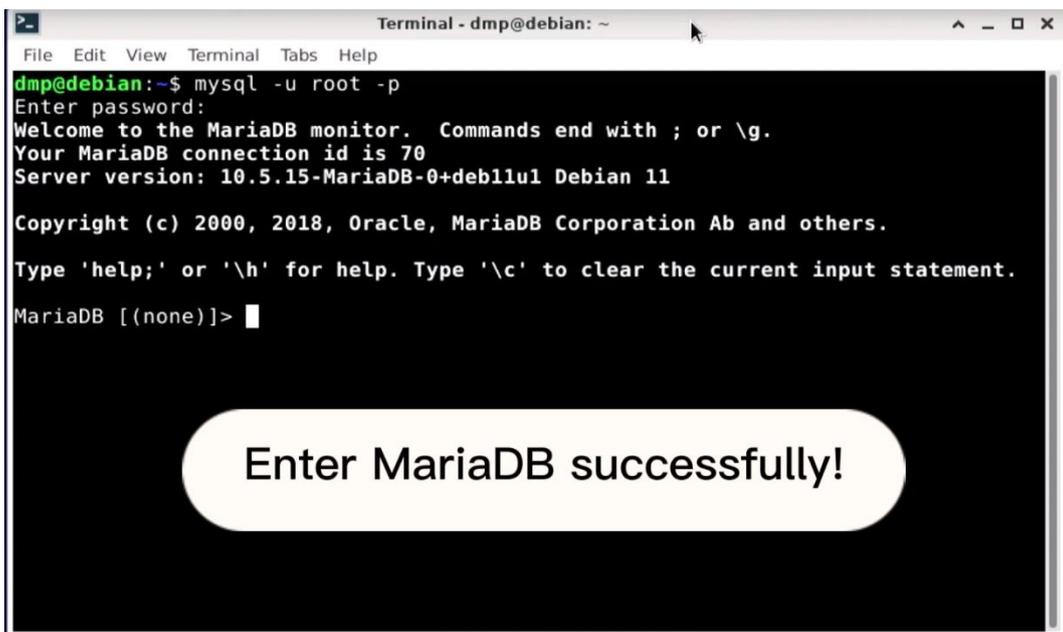
K. Execute: `mysql -u root -p`



```
Terminal - dmp@debian: ~
File Edit View Terminal Tabs Help
dmp@debian:~$ mysql -u root -p
```

execute: `mysql -u root -p`

Enter MariaDB successfully!



```
Terminal - dmp@debian: ~
File Edit View Terminal Tabs Help
dmp@debian:~$ mysql -u root -p
Enter password:
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 70
Server version: 10.5.15-MariaDB-0+deb11u1 Debian 11

Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

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

MariaDB [(none)]>
```

Enter MariaDB successfully!