

PRACTICAL 8

Aim: To install MySQL server to configure database server and install phpMyAdmin to operate MySQL on web browser from clients.

Step 1: First step would be to install MySQL server and configure it.

sudo apt-get install mysql-server-5.7

```
atharva@Atharva:~$ sudo apt-get install mysql-server
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  libb101 libb101-fast-perl libb101-pn-perl libb101-bin libb101-perl libb101ldbl libhtml-template-perl libncab2 libprotobuf-lite23 necab-ipadic necab-ipadic-utf8 necab-utils mysql-client-8.0
  mysql-client-core-8.0 mysql-common mysql-server mysql-server-8.0 mysql-server-core-8.0
Suggested packages:
  libipc-sharedcache-perl mailx tinysa
The following NEW packages will be installed:
  libb101 libb101-fast-perl libb101-pn-perl libb101-bin libb101-perl libb101ldbl libhtml-template-perl libncab2 libprotobuf-lite23 necab-ipadic necab-ipadic-utf8 necab-utils mysql-client-8.0
  mysql-client-core-8.0 mysql-common mysql-server mysql-server-8.0 mysql-server-core-8.0
0 upgraded, 18 newly installed, 0 to remove and 5 not upgraded.
Need to get 29.2 MB of archives.
After this operation, 242 MB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://in.archive.ubuntu.com/ubuntu jammy/main amd64 mysql-common all 5.8+1.0.8 [7,212 B]
Get:2 http://in.archive.ubuntu.com/ubuntu jammy-updates/main amd64 mysql-client-core-8.0 amd64 8.0.34-0ubuntu0.22.04.1 [2,754 kB]
Get:3 http://in.archive.ubuntu.com/ubuntu jammy-updates/main amd64 mysql-client-8.0 amd64 8.0.34-0ubuntu0.22.04.1 [22.7 kB]
Get:4 http://in.archive.ubuntu.com/ubuntu jammy/main amd64 libb101 amd64 0.3-112-1build1 [7,176 B]
Get:5 http://in.archive.ubuntu.com/ubuntu jammy/main amd64 libncab2 amd64 0.996-14build9 [199 kB]
Get:6 http://in.archive.ubuntu.com/ubuntu jammy-updates/main amd64 libprotobuf-lite23 amd64 3.12.4-1ubuntu7.22.04.1 [209 kB]
Get:7 http://in.archive.ubuntu.com/ubuntu jammy-updates/main amd64 mysql-server-core-8.0 amd64 8.0.34-0ubuntu0.22.04.1 [17.5 MB]
Get:8 http://in.archive.ubuntu.com/ubuntu jammy-updates/main amd64 mysql-server-8.0 amd64 8.0.34-0ubuntu0.22.04.1 [1,437 kB]
Get:9 http://in.archive.ubuntu.com/ubuntu jammy/main amd64 libb101-perl all 4.54-1 [180 kB]
Get:10 http://in.archive.ubuntu.com/ubuntu jammy/main amd64 libb101ldbl amd64 2.4.2-2build2 [28.0 kB]
Get:11 http://in.archive.ubuntu.com/ubuntu jammy/main amd64 libb101-fast-perl amd64 0.82+ds-1build1 [22.8 kB]
Get:12 http://in.archive.ubuntu.com/ubuntu jammy/main amd64 libb101-pn-perl all 1:2.15-1 [10.5 kB]
Get:13 http://in.archive.ubuntu.com/ubuntu jammy/main amd64 libb101-bin amd64 2.4.2-2build2 [11.2 kB]
Get:14 http://in.archive.ubuntu.com/ubuntu jammy/main amd64 libhtml-template-perl all 2.97-1.1 [59.1 kB]
Get:15 http://in.archive.ubuntu.com/ubuntu jammy/main amd64 necab-utils amd64 0.996-14build9 [4,850 B]
Get:16 http://in.archive.ubuntu.com/ubuntu jammy/main amd64 necab-ipadic all 2.7.0-20070801+main-3 [6,718 kB]
Get:17 http://in.archive.ubuntu.com/ubuntu jammy/main amd64 necab-ipadic-utf8 all 2.7.0-20070801+main-3 [4,384 B]
Get:18 http://in.archive.ubuntu.com/ubuntu jammy-updates/main amd64 mysql-server all 8.0.34-0ubuntu0.22.04.1 [9,460 B]
```

Step 2: Once the MySQL server installation is done you can connect to it by opening it

mysql -u root p

```
atharva@Atharva:~$ sudo mysql -u root -p
[sudo] password for atharva:
Enter password:
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 9
Server version: 8.0.34-0ubuntu0.22.04.1 (Ubuntu)

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

mysql>
```

Step 3: Now we will display the user info and also the ip for our host by using the following command.

select user, host from mysql.user;

```
mysql> select user, host from mysql.user;
+-----+-----+
| user          | host          |
+-----+-----+
| debian-sys-maint | localhost    |
| mysql.infoschema | localhost    |
| mysql.session  | localhost    |
| mysql.sys      | localhost    |
| root           | localhost    |
+-----+-----+
5 rows in set (0.00 sec)
```

SHOW VARIABLES WHERE Variable_name='port';

```
mysql> SHOW VARIABLES WHERE Variable_name='port';
+-----+-----+
| Variable_name | Value |
+-----+-----+
| port          | 3306  |
+-----+-----+
1 row in set (0.06 sec)
```

Exit the mysql prompt using 'exit' command.

```
mysql> exit
Bye
```

Step 4: Now let's install phpMyAdmin so that we can operate MySQL on web browser from clients.

`sudo apt-get install phpMyAdmin`

```
atharva@atharva:~$ sudo apt-get install phpmyadmin
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  apache2 apache2-bin apache2-data apache2-utils dbconfig-common dbconfig-mysql gcc-profiles-free javascript-common libapr1 libaprutil1 libaprutil1-dbd-sqlite3 libaprutil1-ldap libjs-bootstrap4
  libjs-codeeditor libjs-jquery libjs-jquery-mousewheel libjs-jquery-timepicker libjs-jquery-ui libjs-popper.js libjs-sizzle libjs-sphinxdoc libjs-underscore libonig5 libzip4 node-jquery php-bz2 php-cli
  php-common php-curl php-gd php-google-recaptcha php-json php-mariadb-mysqldb php-mbstring php-mysql php-nikic-fast-route php-phpmyadmin-notranslator php-phpmyadmin-shapefile php-phpmyadmin-sql-parser
  php-phpsclib php-psr-cache php-psr-container php-psr-log php-symfony-cache php-symfony-cache-contracts php-symfony-config php-symfony-dependency-injection php-symfony-deprecation-contracts
  php-symfony-expression-language php-symfony-filesystem php-symfony-polyfill-php80 php-symfony-polyfill-php81 php-symfony-service-contracts php-symfony-var-exporter php-tcpdf php-twig php-twig-l18n-extension
  php-xml php-zip php8.1-bz2 php8.1-cli php8.1-common php8.1-curl php8.1-gd php8.1-ldap php8.1-mbstring php8.1-mysql php8.1-opcache php8.1-readline php8.1-xml php8.1-zip
Suggested packages:
  apache2-doc apache2-suexec-pristine | apache2-suexec-custom libjs-jquery-ui-docs php-dbase php-libsodium php-mcrypt php-gmp php-symfony-yaml php-symfony-finder
  php-symfony-proxy-manager-bridge php-twig-doc php-pear php-recode php-gd2 php-pragmarx-google2fa-qrcode php-sanyoul-uzf-php-server
Recommended packages:
  php-mcrypt
The following NEW packages will be installed:
  apache2 apache2-bin apache2-data apache2-utils dbconfig-common dbconfig-mysql gcc-profiles-free javascript-common libapr1 libaprutil1 libaprutil1-dbd-sqlite3 libaprutil1-ldap libjs-bootstrap4
  libjs-codeeditor libjs-jquery libjs-jquery-mousewheel libjs-jquery-timepicker libjs-jquery-ui libjs-popper.js libjs-sizzle libjs-sphinxdoc libjs-underscore libonig5 libzip4 node-jquery php-bz2 php-cli
  php-common php-curl php-gd php-google-recaptcha php-json php-mariadb-mysqldb php-mbstring php-mysql php-nikic-fast-route php-phpmyadmin-notranslator php-phpmyadmin-shapefile php-phpmyadmin-sql-parser
  php-phpsclib php-psr-cache php-psr-container php-psr-log php-symfony-cache php-symfony-cache-contracts php-symfony-config php-symfony-dependency-injection php-symfony-deprecation-contracts
  php-symfony-expression-language php-symfony-filesystem php-symfony-polyfill-php80 php-symfony-polyfill-php81 php-symfony-service-contracts php-symfony-var-exporter php-tcpdf php-twig php-twig-l18n-extension
  php-xml php-zip php8.1-bz2 php8.1-cli php8.1-common php8.1-curl php8.1-gd php8.1-ldap php8.1-mbstring php8.1-mysql php8.1-opcache php8.1-readline php8.1-xml php8.1-zip phpmyadmin
0 upgraded, 71 newly installed, 0 to remove and 5 not upgraded.
Need to get 23.4 MB of archives.
After this operation, 108 MB of additional disk space will be used.
```

During installation you'll be asked which web server you want to configure to run phpMyAdmin.

Select "apache2"

Configuring phpmyadmin

Please choose the web server that should be automatically configured to run phpMyAdmin.

Web server to reconfigure automatically:

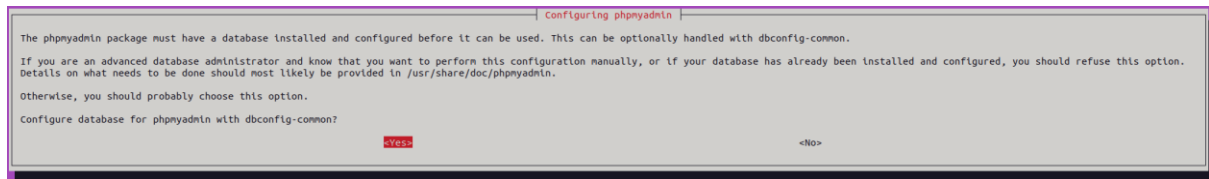
☒

 apache2

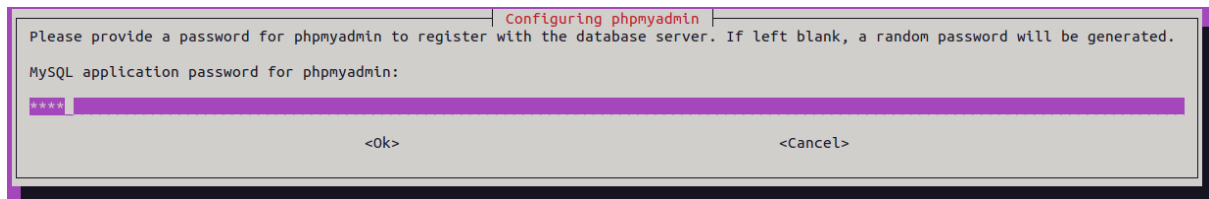
☐ lighttpd

<Ok>

After that you'll be asked that if you want dbconfig-common for your phpMyAdmin, select yes and proceed.

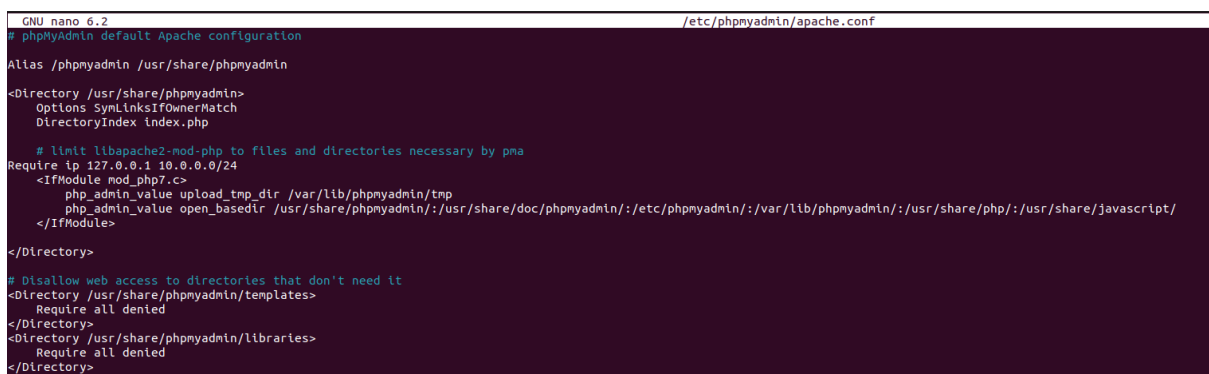


Now set the password for phpmyadmin.



Step 5: Now we have to edit the apache file and set the required ip for our server.

`sudo nano /etc/phpmyadmin/apache.conf`



Step 6: Now restart the apache server which can be done using the following command.

`sudo /etc/init.d/apache2 restart`

