

1)

```

MariaDB [University]> bye
111501015@iitpkdd122:~$ mysql -u Zhang -pZhang
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 13
Server version: 10.2.12-MariaDB-10.2.12+maria~xenial mariadb.org binary distribution

Copyright (c) 2000, 2017, Oracle, MariaDB Corporation Ab and others.

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

MariaDB [(none)]> SET ROLE Student;
Query OK, 0 rows affected (0.00 sec)

MariaDB [(none)]> use University
Database changed
MariaDB [University]> call DETAILS();
+-----+-----+-----+-----+
| ID    | name  | dept_name | tot_cred |
+-----+-----+-----+-----+
| 00128 | Zhang | Comp. Sci. | 7        |
+-----+-----+-----+-----+
1 row in set (0.00 sec)

Query OK, 0 rows affected (0.00 sec)

MariaDB [University]> call PEER_STUDENT();
+-----+
| name  |
+-----+
| Zhang |
| Shankar |
| Levy  |
| Williams |
| Brown |
| Bourikas |
+-----+
6 rows in set (0.00 sec)

Query OK, 0 rows affected (0.00 sec)

MariaDB [University]>

```

```

MariaDB [University]> select * from info;

```

```

+-----+-----+-----+-----+
| ID    | name  | dept_name | tot_cred |
+-----+-----+-----+-----+
| 00128 | Zhang | Comp. Sci. | 7        |
| NULL  | Shankar | NULL      | NULL     |
| NULL  | Levy  | NULL      | NULL     |
| NULL  | Williams | NULL      | NULL     |
| NULL  | Brown | NULL      | NULL     |
| NULL  | Bourikas | NULL      | NULL     |
+-----+-----+-----+-----+
6 rows in set (0.00 sec)

```

9 rows in set (0.00 sec)

MariaDB [University]> show tables;

```
+-----+
| Tables_in_University |
+-----+
| my_details            |
| students              |
+-----+
```

2 rows in set (0.00 sec)

MariaDB [University]> select * from students;

```
+-----+
| name      |
+-----+
| Zhang     |
| Shankar   |
| Levy      |
| Williams  |
| Brown     |
| Bourikas  |
+-----+
```

6 rows in set (0.00 sec)

```
CREATE FUNCTION get_username() RETURNS VARCHAR(20)
RETURN SUBSTRING_INDEX(USER(), '@', 1) ;

CREATE OR REPLACE VIEW my_details AS SELECT * FROM student WHERE name=get_username();
CREATE OR REPLACE VIEW students AS SELECT DISTINCT S.name FROM student AS S,
    takes AS T
    WHERE T.course_id IN (SELECT T.course_id as c_id
    FROM takes AS T, student AS S
    WHERE T.ID=S.ID and S.name = get_username())
    and T.ID = S.ID;

CREATE ROLE Student;

DELIMITER //

CREATE OR REPLACE TRIGGER new_user
AFTER INSERT ON student
FOR EACH ROW
BEGIN
    CALL create_user(new.`name`, new.`name`);
END //

CREATE OR REPLACE PROCEDURE create_user( IN username VARCHAR(20),
    IN `password` VARCHAR(20))
BEGIN
    DECLARE stmt VARCHAR(100);
    prepare stmt FROM CONCAT('CREATE OR REPLACE USER ', username, '@' IDENTIFIED BY ', `password`, ');
    execute stmt;
    prepare stmt FROM CONCAT('GRANT Student TO ', username);
    execute stmt;
END //

CREATE OR REPLACE PROCEDURE INITUSERS()
BEGIN
    DECLARE n INT DEFAULT 0;
    DECLARE i INT DEFAULT 0;
    DECLARE username VARCHAR(20);
    SELECT COUNT(*) FROM student INTO n;
    SET i=0;
    WHILE i<n DO
        SET username = (SELECT name FROM student LIMIT i,1);
        CALL create_user(username, username);
        SET i = i + 1;
    END WHILE;
END //

CREATE OR REPLACE PROCEDURE DETAILS()
BEGIN
    SELECT * FROM my_details;
END //
```

1:--- lab6.sql Top L51 (SQL[MySQL])

```

CREATE OR REPLACE PROCEDURE PEER_STUDENT()
BEGIN
    SELECT DISTINCT * FROM students;
END //

DELIMITER ;
CREATE OR REPLACE VIEW info AS select D.ID, S.name, D.dept_name, D.tot_cred from my_details AS D RIGHT JOIN students AS S ON D.name=S.name;
GRANT EXECUTE ON PROCEDURE University.DETAILS TO Student ;
GRANT SELECT ON University.my_details TO Student ;
GRANT SELECT ON University.students TO Student ;
GRANT SELECT ON University.info TO Student ;
GRANT EXECUTE ON PROCEDURE University.PEER_STUDENT TO Student ;

call INITUSERS();

```

2)

yum update
yum install httpd

```

root@iitpkdd130a:~
File Edit View Search Terminal Help
httpd-tools      x86_64      2.4.6-67.el7.centos.6      updates      88 k
mailcap          noarch     2.1.41-2.el7              base         31 k

Transaction Summary
=====
Install 1 Package (+2 Dependent packages)

Total download size: 2.8 M
Installed size: 9.6 M
Is this ok [y/d/N]: y
Downloading packages:
(1/3): httpd-2.4.6-67.el7.centos.6.x86_64.rpm | 2.7 MB 00:00:00
(2/3): mailcap-2.1.41-2.el7.noarch.rpm | 31 kB 00:00:00
(3/3): httpd-tools-2.4.6-67.el7.centos.6.x86_64.rpm | 88 kB 00:00:01
-----
Total | 1.2 MB/s | 2.8 MB 00:00:02
Running transaction check
Running transaction test
Transaction test succeeded
Running transaction
  Installing : httpd-tools-2.4.6-67.el7.centos.6.x86_64 1/3
  Installing : mailcap-2.1.41-2.el7.noarch 2/3
  Installing : httpd-2.4.6-67.el7.centos.6.x86_64 3/3
  Verifying : mailcap-2.1.41-2.el7.noarch 1/3
  Verifying : httpd-2.4.6-67.el7.centos.6.x86_64 2/3
  Verifying : httpd-tools-2.4.6-67.el7.centos.6.x86_64 3/3

Installed:
  httpd.x86_64 0:2.4.6-67.el7.centos.6

Dependency Installed:
  httpd-tools.x86_64 0:2.4.6-67.el7.centos.6 mailcap.noarch 0:2.1.41-2.el7

Complete!
[root@iitpkdd130a ~]#

```

sudo service httpd start

```
[root@iitpkdd130a ~]# systemctl start http.service
Redirecting to /bin/systemctl start http.service
Failed to start http.service: Unit not found.
[root@iitpkdd130a ~]# service httpd start
Redirecting to /bin/systemctl start httpd.service
[root@iitpkdd130a ~]#
```

 root@iitpkdd130a:~

Yum install mariadb-server mariadb

```
File Edit View Search Terminal Help
No package mariadb-server available.
Resolving Dependencies
--> Running transaction check
---> Package mariadb.x86_64 1:5.5.56-2.el7 will be installed
--> Finished Dependency Resolution

Dependencies Resolved

=====
Package                Arch             Version           Repository        Size
=====
Installing:
mariadb                x86_64           1:5.5.56-2.el7    base              8.7 M
=====

Transaction Summary
=====
Install 1 Package

Total download size: 8.7 M
Installed size: 49 M
Is this ok [y/d/N]: Y
Downloading packages:
mariadb-5.5.56-2.el7.x86_64.rpm | 8.7 MB 00:00:01
Running transaction check
Running transaction test
Transaction test succeeded
Running transaction
  Installing : 1:mariadb-5.5.56-2.el7.x86_64 1/1
  Verifying  : 1:mariadb-5.5.56-2.el7.x86_64 1/1

Installed:
mariadb.x86_64 1:5.5.56-2.el7

Complete!
[root@iitpkdd130a ~]#
```

```
Applications  Places  Terminal  Thu 06:37  [system icons]

root@iitpkdd130a:~

File Edit View Search Terminal Help

Verifying : perl-IO-Compress-2.061-2.el7.noarch 3/8
Verifying : 1:perl-Compress-Raw-Zlib-2.061-4.el7.x86_64 4/8
Verifying : perl-PlRPC-0.2020-14.el7.noarch 5/8
Verifying : 1:mariadb-server-5.5.56-2.el7.x86_64 6/8
Verifying : perl-Compress-Raw-Bzip2-2.061-3.el7.x86_64 7/8
Verifying : perl-DBD-MySQL-4.023-5.el7.x86_64 8/8

Installed:
mariadb-server.x86_64 1:5.5.56-2.el7

Dependency Installed:
perl-Compress-Raw-Bzip2.x86_64 0:2.061-3.el7 perl-Compress-Raw-Zlib.x86_64 1:2.061-4.el7
perl-DBD-MySQL.x86_64 0:4.023-5.el7 perl-DBI.x86_64 0:1.627-4.el7
perl-IO-Compress.noarch 0:2.061-2.el7 perl-Net-Daemon.noarch 0:0.48-5.el7
perl-PlRPC.noarch 0:0.2020-14.el7

Complete!
[root@iitpkdd130a ~]# systemctl start mariadb
[root@iitpkdd130a ~]# systemctl enable mariadb.service
Created symlink from /etc/systemd/system/multi-user.target.wants/mariadb.service to /usr/lib/systemd/system/mariadb.service.
[root@iitpkdd130a ~]# 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
you haven't set the root password yet, the password will be blank,
so you should just press enter here.

Enter current password for root (enter for none):
OK, successfully used password, moving on...

Setting the root password ensures that nobody can log into the MariaDB
root user without the proper authorisation

root@iitpkdd130a:~ 1 / 4
```

Systemctl start mariadb

Systemctl enable mariadb.service

ApplicationsPlacesTerminal

Thu 06:27

root@iitpkdd130a:~

File Edit View Search Terminal Help

Downloading packages:

(1/6): libzip-0.10.1-8.el7.x86_64.rpm	48 kB	00:00:00
(2/6): php-5.4.16-43.el7_4.x86_64.rpm	1.4 MB	00:00:00
(3/6): php-mysql-5.4.16-43.el7_4.x86_64.rpm	101 kB	00:00:00
(4/6): php-common-5.4.16-43.el7_4.x86_64.rpm	565 kB	00:00:00
(5/6): php-pdo-5.4.16-43.el7_4.x86_64.rpm	98 kB	00:00:00
(6/6): php-cli-5.4.16-43.el7_4.x86_64.rpm	2.7 MB	00:00:03

Total1.5 MB/s | 4.9 MB00:00:03

Running transaction check

Running transaction test

Transaction test succeeded

Running transaction

Installing : libzip-0.10.1-8.el7.x86_64	1/6
Installing : php-common-5.4.16-43.el7_4.x86_64	2/6
Installing : php-cli-5.4.16-43.el7_4.x86_64	3/6
Installing : php-pdo-5.4.16-43.el7_4.x86_64	4/6
Installing : php-mysql-5.4.16-43.el7_4.x86_64	5/6
Installing : php-5.4.16-43.el7_4.x86_64	6/6
Verifying : php-cli-5.4.16-43.el7_4.x86_64	1/6
Verifying : php-5.4.16-43.el7_4.x86_64	2/6
Verifying : php-common-5.4.16-43.el7_4.x86_64	3/6
Verifying : libzip-0.10.1-8.el7.x86_64	4/6
Verifying : php-pdo-5.4.16-43.el7_4.x86_64	5/6
Verifying : php-mysql-5.4.16-43.el7_4.x86_64	6/6

Installed:

php.x86_64 0:5.4.16-43.el7_4	php-mysql.x86_64 0:5.4.16-43.el7_4
------------------------------	------------------------------------

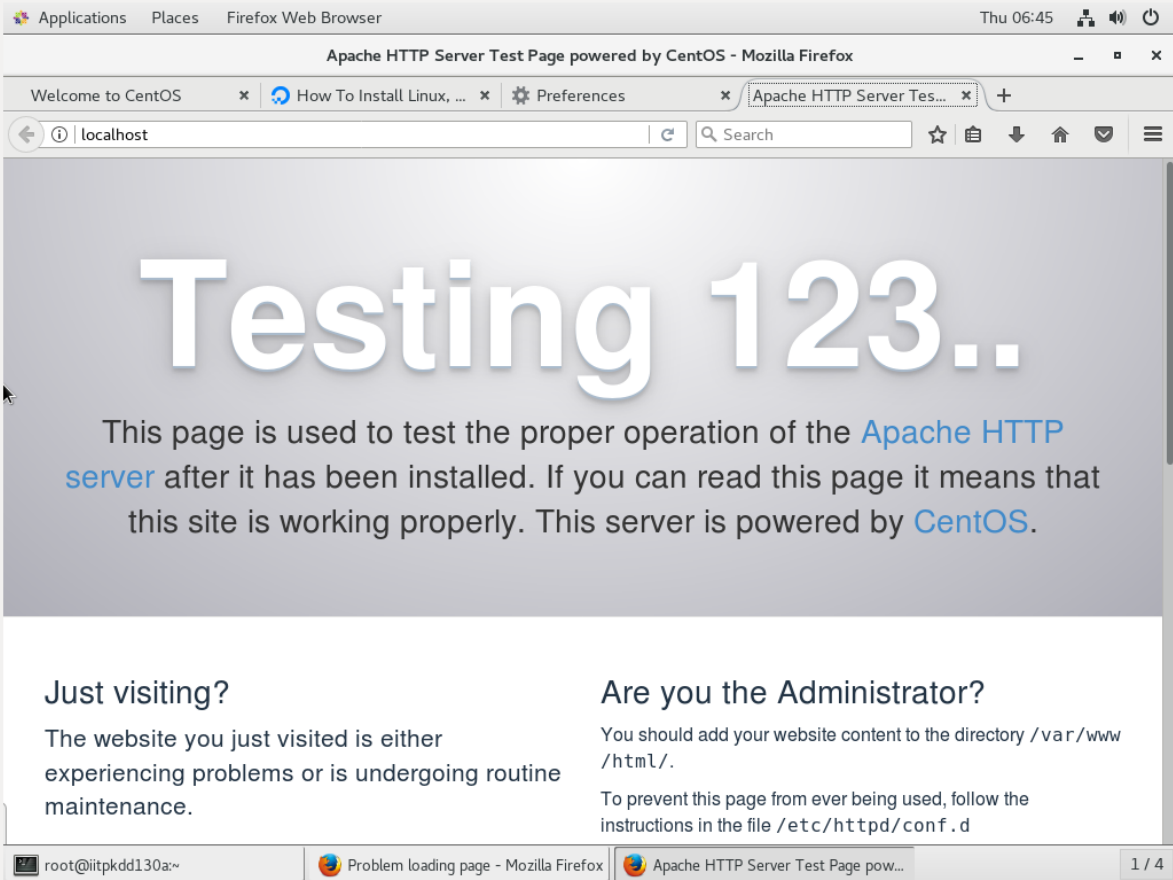
Dependency Installed:

libzip.x86_64 0:0.10.1-8.el7	php-cli.x86_64 0:5.4.16-43.el7_4	php-common.x86_64 0:5.4.16-43.el7_4
php-pdo.x86_64 0:5.4.16-43.el7_4		

Complete!

[root@iitpkdd130a ~]#

Systemctl restart httpd.service



Applications Places Firefox Web Browser Thu 06:47

phpinfo() - Mozilla Firefox

Welcome to CentOS x How To Install Linux, ... x Preferences x phpinfo() x +

localhost/info.php

PHP Version 5.4.16

System	Linux iitpkdd130a 3.10.0-693.el7.x86_64 #1 SMP Tue Aug 22 21:09:27 UTC 2017 x86_64
Build Date	Nov 15 2017 16:34:47
Server API	Apache 2.0 Handler
Virtual Directory Support	disabled
Configuration File (php.ini) Path	/etc
Loaded Configuration File	/etc/php.ini
Scan this dir for additional .ini files	/etc/php.d
Additional .ini files parsed	/etc/php.d/curl.ini, /etc/php.d/fileinfo.ini, /etc/php.d/json.ini, /etc/php.d/mysqli.ini, /etc/php.d/mysql.ini, /etc/php.d/pdo.ini, /etc/php.d/pdo_mysql.ini, /etc/php.d/pdo_sqlite.ini, /etc/php.d/phar.ini, /etc/php.d/sqlite3.ini, /etc/php.d/zip.ini
PHP API	20100412
PHP Extension	20100525
Zend Extension	220100525
Zend Extension Build	API220100525,NTS
PHP Extension Build	API20100525,NTS
Debug Build	no
Thread Safety	disabled
Zend Signal Handling	disabled

root@iitpkdd130a:~ phpinfo() - Mozilla Firefox 1 / 4

localhost/phpmyadmin/index.php?token=198e814dc442922bb248105cf8663424

phpMyAdmin

Recent Favorites

- New
- blog
- car_dealer
- information_schema
- laravel
- mysql
- performance_schema
- test

Server: localhost

Databases SQL Status User accounts Export Import Settings Replication Variables More

General settings

[Change password](#)

Server connection collation: utf8mb4_unicode_ci

Appearance settings

Language: English

Theme: pmahomme

Font size: 82%

[More settings](#)

Database server

- Server: Localhost via UNIX socket
- Server type: MariaDB
- Server version: 10.2.13-MariaDB-10.2.13+maria~xenial - mariadb.org binary distribution
- Protocol version: 10
- User: libin@localhost
- Server charset: UTF-8 Unicode (utf8)

Web server

- Apache/2.4.18 (Ubuntu)
- Database client version: libmysql - mysqlnd 5.0.12-dev - 20150407 - \$id: b5c5906d452ec590732a93b051f3827e02749b83 \$
- PHP extension: mysqli
- PHP version: 7.0.25-0ubuntu0.16.04.1

phpMyAdmin

- Version information: 4.5.4.1deb2ubuntu2
- [Documentation](#)

Console

← → ↻ ⓘ localhost:8000

☆ 🔔 🗺 🌐 ⋮

STUDENT TABLE

search Student by name Submit

ID	Name	Department Name	Total Credit
00128	Zhang	Comp. Sci.	102
23121	Chavez	Finance	110
55739	Sanchez	Music	38

← → ↻ ⓘ localhost:8000

☆ 🔔 🗺 🌐 ⋮

STUDENT TABLE

search Student by name Submit

ID	Name	Department Name	Total Credit
00128	Zhang	Comp. Sci.	102
12345	Shankar	Comp. Sci.	32
19991	Brandt	History	80
23121	Chavez	Finance	110
44553	Peltier	Physics	56
45678	Levy	Physics	46
54321	Williams	Comp. Sci.	54
55739	Sanchez	Music	38

```
<!DOCTYPE html>
<html>
<head>
  <title>
    Students List
  </title>
  <link rel="stylesheet"
href="https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0/css/bootstrap.min.css" integrity="sha384-
Gn5384xqQ1aoWXA+058RXPxPg6fy4IWvTNh0E263XmFcJlSAwiGgFAW/dAiS6JXm"
crossorigin="anonymous">
</head>
<body class="container">
```

```

<h1>STUDENT TABLE</h1>
<form method="post">
    <label> search Student by name</label>
    <input type="name" name="name" class=".form-control ">
    <button type="submit" class="btn btn-default">Submit</button>
</form>
<table class="table table-striped">
    <thead>
        <th>
            ID
        </th>

        <th>
            Name
        </th>

        <th>
            Department Name
        </th>

        <th>
            Total Credit
        </th>
    </thead>
    <tbody>
        <?php
            $conn = new mysqli('localhost', 'libin', 'password', 'University');
            if ($conn->connect_error) {
                die("Connection failed: " . $conn->connect_error);
            }
            if ($_SERVER['REQUEST_METHOD'] === 'POST') {
                $nam = $_POST['name'];
                $datastmt = "SELECT * FROM student WHERE name LIKE
'%" . $nam . "%'";
            }
            else
            {
                $datastmt = "SELECT * FROM student;";
            }
            $result = $conn->query($datastmt);
            if ($result->num_rows > 0) {
                // output data of each row
                while($row = $result->fetch_assoc()) {
                    echo "<tr> <td>" . $row["ID"]. "</td><td>" . $row["name"].
"</td><td>" . $row["dept_name"]."</td><td>" . $row["tot_cred"]. "</td><tr>" ;
                }
            } else {
                echo "0 results";
            }
        </?php>
    </tbody>
</table>

```

```
        }  
        $conn->close();  
    ?>  
</tbody>  
</table>  
</body>  
</html>
```

← → ↻ ⓘ localhost:8000 ☆ 🚦 🌐 🗑 ⋮

STUDENT TABLE

search Student by name

ID	Name	Department Name	Total Credit
45678	Levy	Physics	46

Installed LAMP
Installed PhpAdmin
made toy website using student table