Rao Nauman

[Company name]  [Company address]

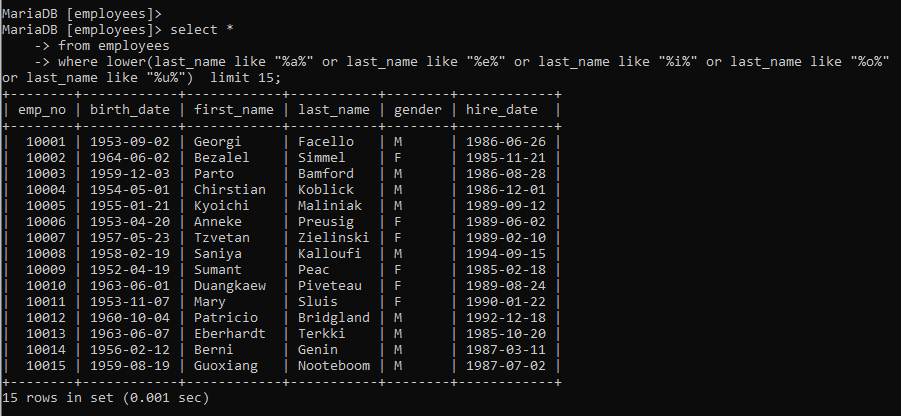
ASSIGNMENT-1

**QUESTION-1:**

MariaDB [employees]> select \*

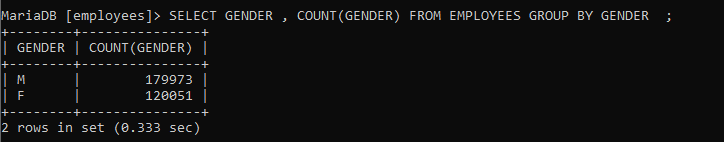
-> from employees

-> where lower(last\_name like "%a%" or last\_name like "%e%" or last\_name like "%i%" or last\_name like "%o%" or last\_name like "%u%") limit 15;



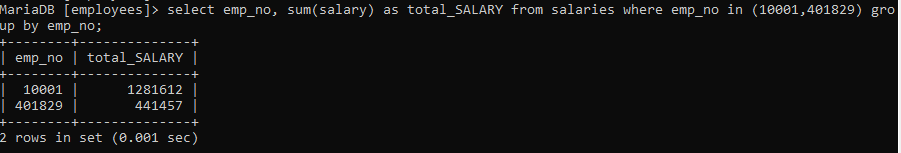
**QUESTION-2:**

SELECT GENDER , COUNT(GENDER) FROM EMPLOYEES GROUP BY GENDER ;



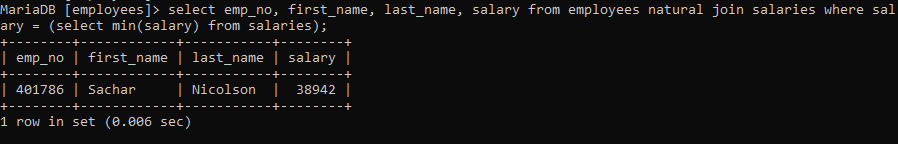
**QUESTION-3:**

select emp\_no, sum(salary) as total\_SALARY from salaries where emp\_no in (10001,401829) group by emp\_no;



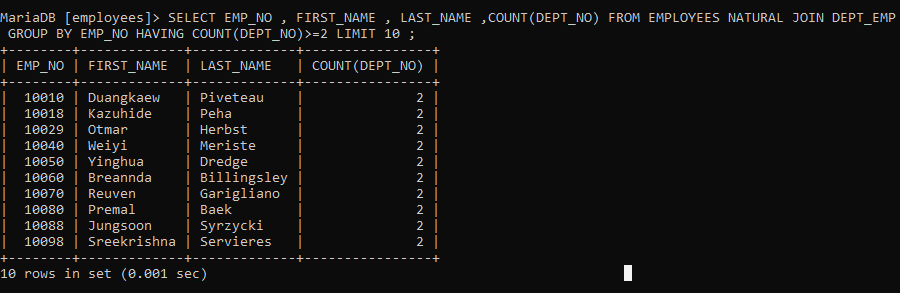
**QUESTION-4:**

select emp\_no, first\_name, last\_name, salary from employees natural join salaries where salary = (select min(salary) from salaries);



**QUESTION-5:**

SELECT EMP\_NO , FIRST\_NAME , LAST\_NAME ,COUNT(DEPT\_NO) FROM EMPLOYEES NATURAL JOIN DEPT\_EMP GROUP BY EMP\_NO HAVING COUNT(DEPT\_NO)>=2 LIMIT 10 ;



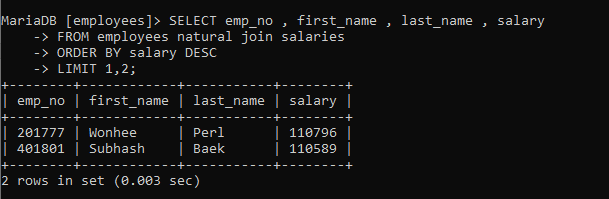
**QUESTION:6**

MariaDB [employees]> SELECT emp\_no , first\_name , last\_name , salary

-> FROM employees natural join salaries

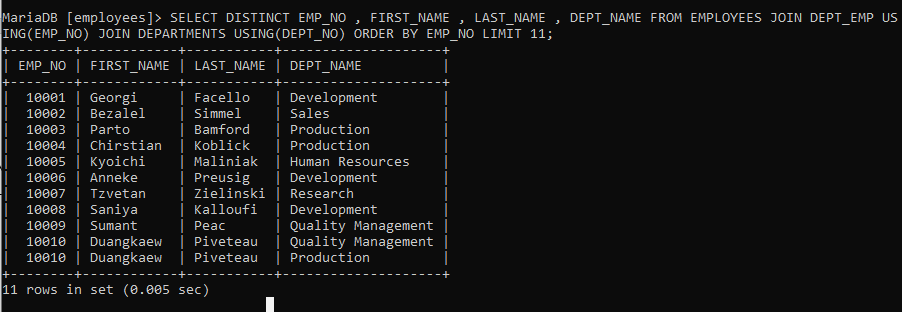
-> ORDER BY salary DESC

-> LIMIT 1,2;



**Question:7**

SELECT DISTINCT EMP\_NO , FIRST\_NAME , LAST\_NAME , DEPT\_NAME FROM EMPLOYEES JOIN DEPT\_EMP USING(EMP\_NO) JOIN DEPARTMENTS USING(DEPT\_NO) LIMIT 11;



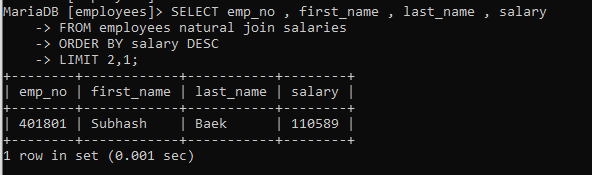
**QUESTION : 8**

SELECT emp\_no , first\_name , last\_name , salary

-> FROM employees natural join salaries

-> ORDER BY salary DESC

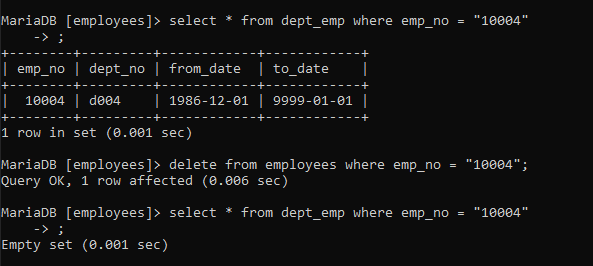
-> LIMIT 2,1;



**QUESTION:9**

**select \* from dept\_emp where emp\_no = "10004"**

**delete from employees where emp\_no = "10004"**

****

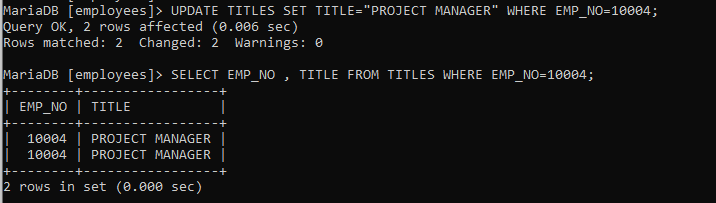
**QUESTION : 10**

delete from employees where hire\_date > '1999-12-31';



**QUESTION 11:**

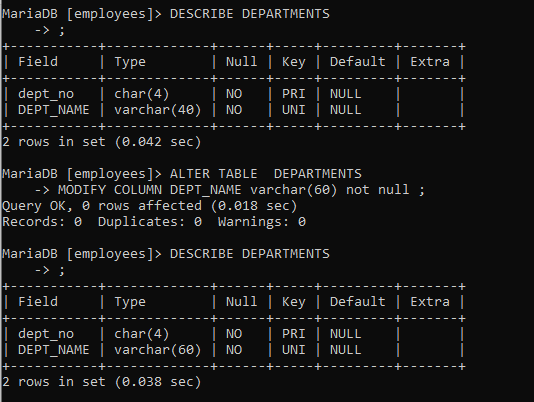
**UPDATE TITLES SET TITLE="PROJECT MANAGER" WHERE EMP\_NO=10004;**

****

**QUESTION : 12**

**ALTER TABLE DEPARTMENTS**

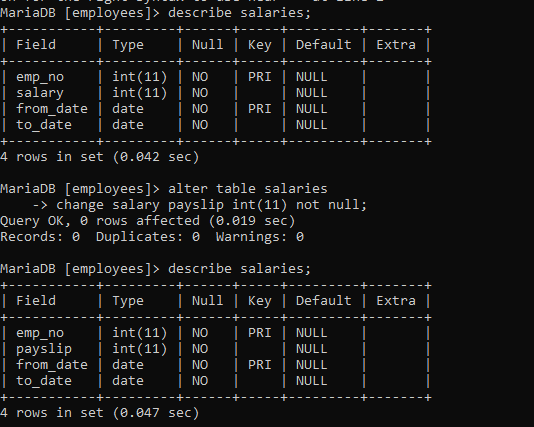
**-> MODIFY COLUMN DEPT\_NAME varchar(60) not null ;**



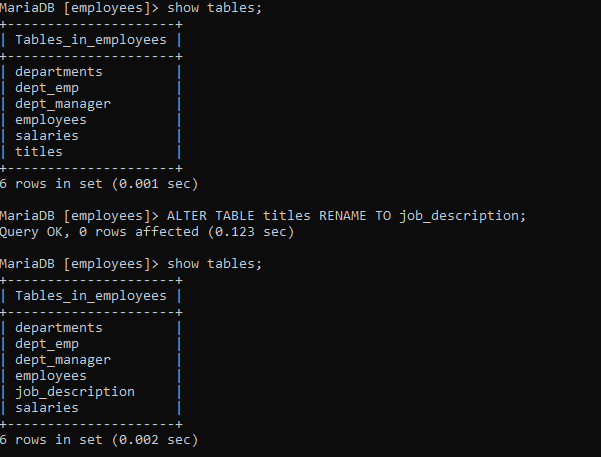
**QUESTION 13:**

alter table salaries

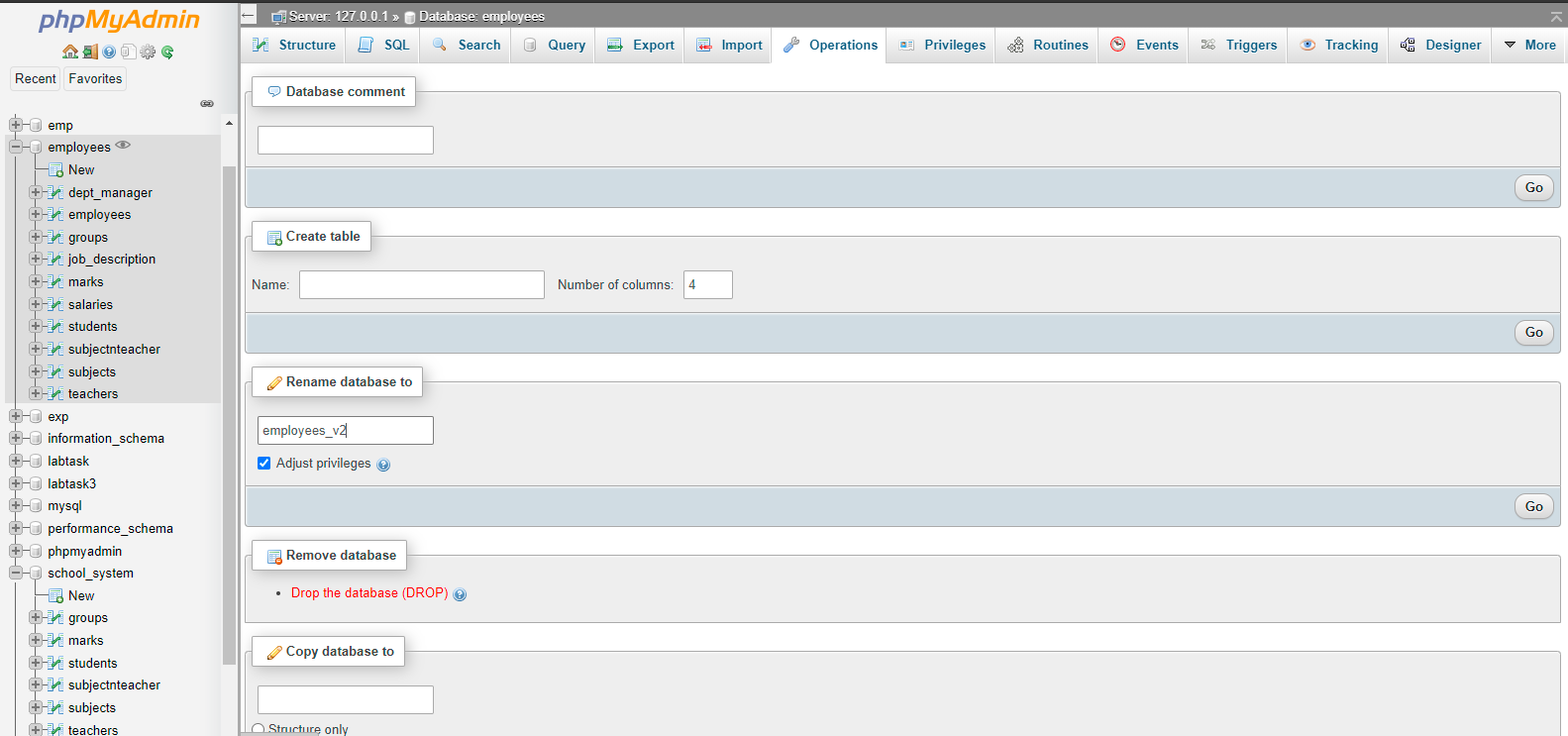
-> change salary payslip int(11) not null;

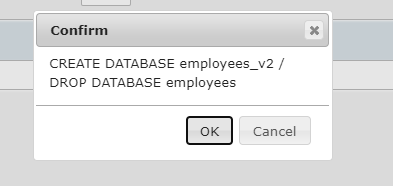


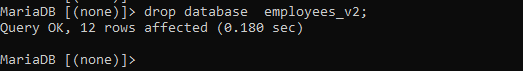
**QUESTION 14:**

alter table titles rename to job\_description; 

**QUESTION 15**







**Part-2:**

DROP DATABASE IF EXISTS school\_system;

CREATE DATABASE IF NOT EXISTS school\_system;

USE school\_system;

SELECT 'CREATING DATABASE STRUCTURE' as 'INFO';

DROP TABLE IF EXISTS groups,

subjects,

teachers,

subjectnteacher,

students,

marks;

create table groups(

group\_id int not null,

name varchar(40) not null,

PRIMARY KEY(group\_id)

);

create table subjects (

subject\_id int not null,

title varchar(40) not null,

PRIMARY KEY(subject\_id)

);

CREATE TABLE teachers(

teacher\_id INT NOT NULL,

first\_name VARCHAR(16) NOT NULL,

last\_name VARCHAR(16) NOT NULL,

PRIMARY KEY(teacher\_id)

);

CREATE TABLE students (

student\_id INT NOT NULL,

first\_name VARCHAR(14) NOT NULL,

last\_name VARCHAR(16) NOT NULL,

group\_id INT NOT NULL,

FOREIGN KEY (group\_id) REFERENCES groups (group\_id) ON DELETE CASCADE,

PRIMARY KEY (student\_id)

);

CREATE TABLE marks(

mark\_id INT NOT NULL,

student\_id INT NOT NULL,

subject\_id INT NOT NULL,

date DATE NOT NULL,

mark INT NOT NULL,

FOREIGN KEY (student\_id) REFERENCES students (student\_id) ON DELETE CASCADE,

FOREIGN KEY (subject\_id) REFERENCES subjects (subject\_id) ON DELETE CASCADE,

PRIMARY KEY(mark\_id)

);

CREATE TABLE subjectnteacher(

subject\_id INT NOT NULL,

teacher\_id INT NOT NULL,

group\_id INT NOT NULL,

FOREIGN KEY (subject\_id) REFERENCES subjects (subject\_id) ON DELETE CASCADE,

FOREIGN KEY (teacher\_id) REFERENCES teachers (teacher\_id) ON DELETE CASCADE,

FOREIGN KEY (group\_id) REFERENCES groups (group\_id) ON DELETE CASCADE

);

show tables;

