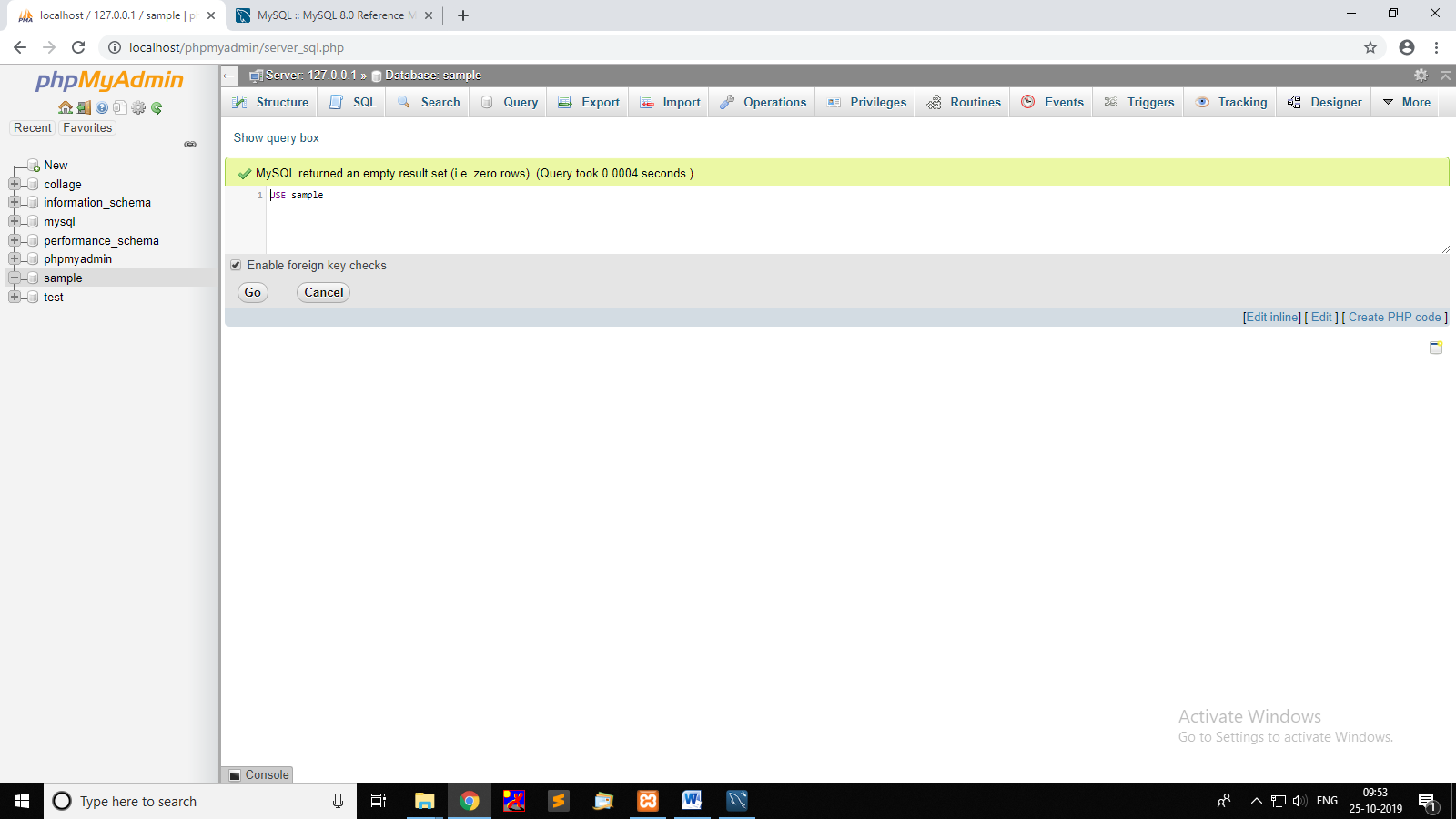
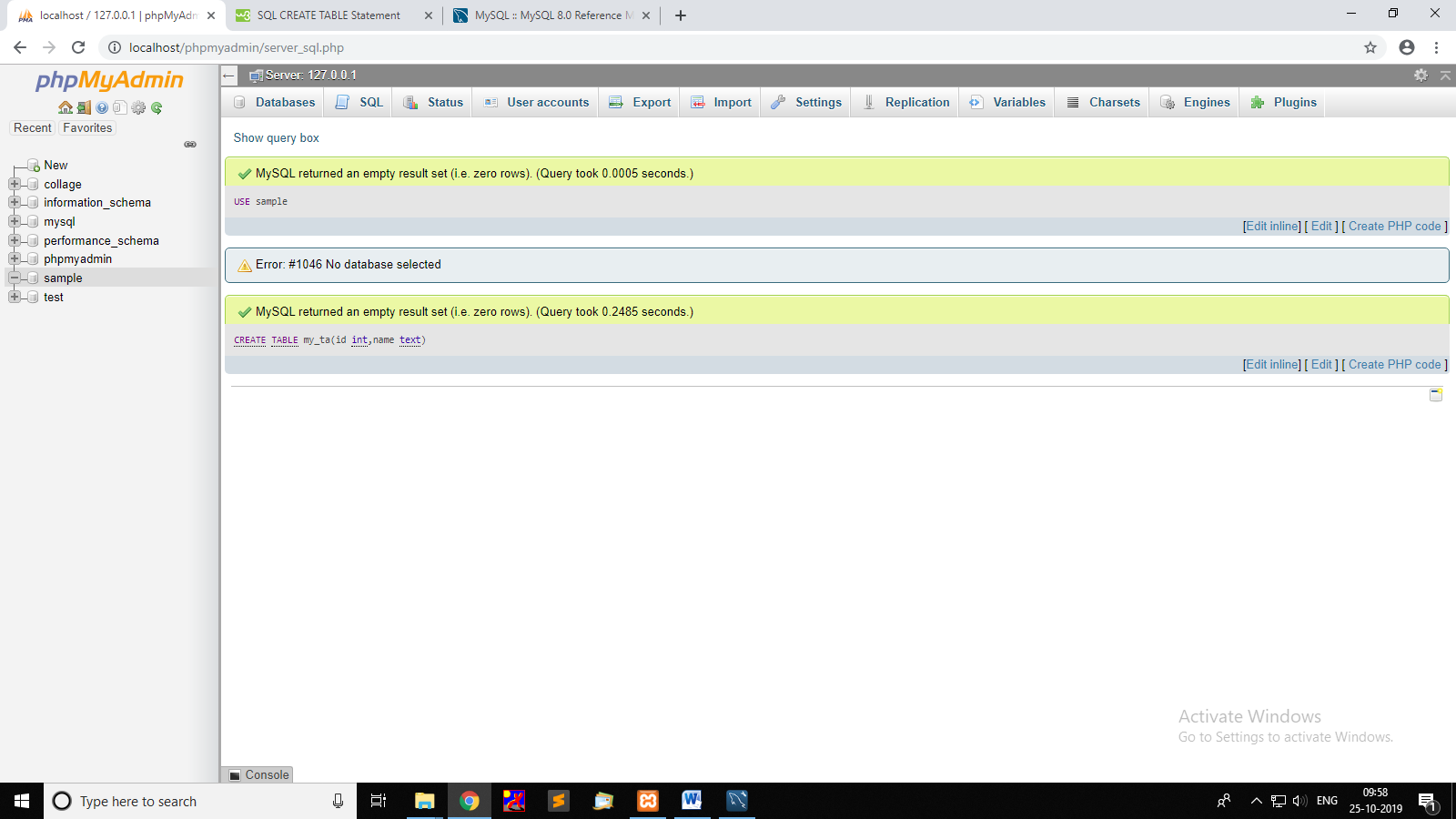
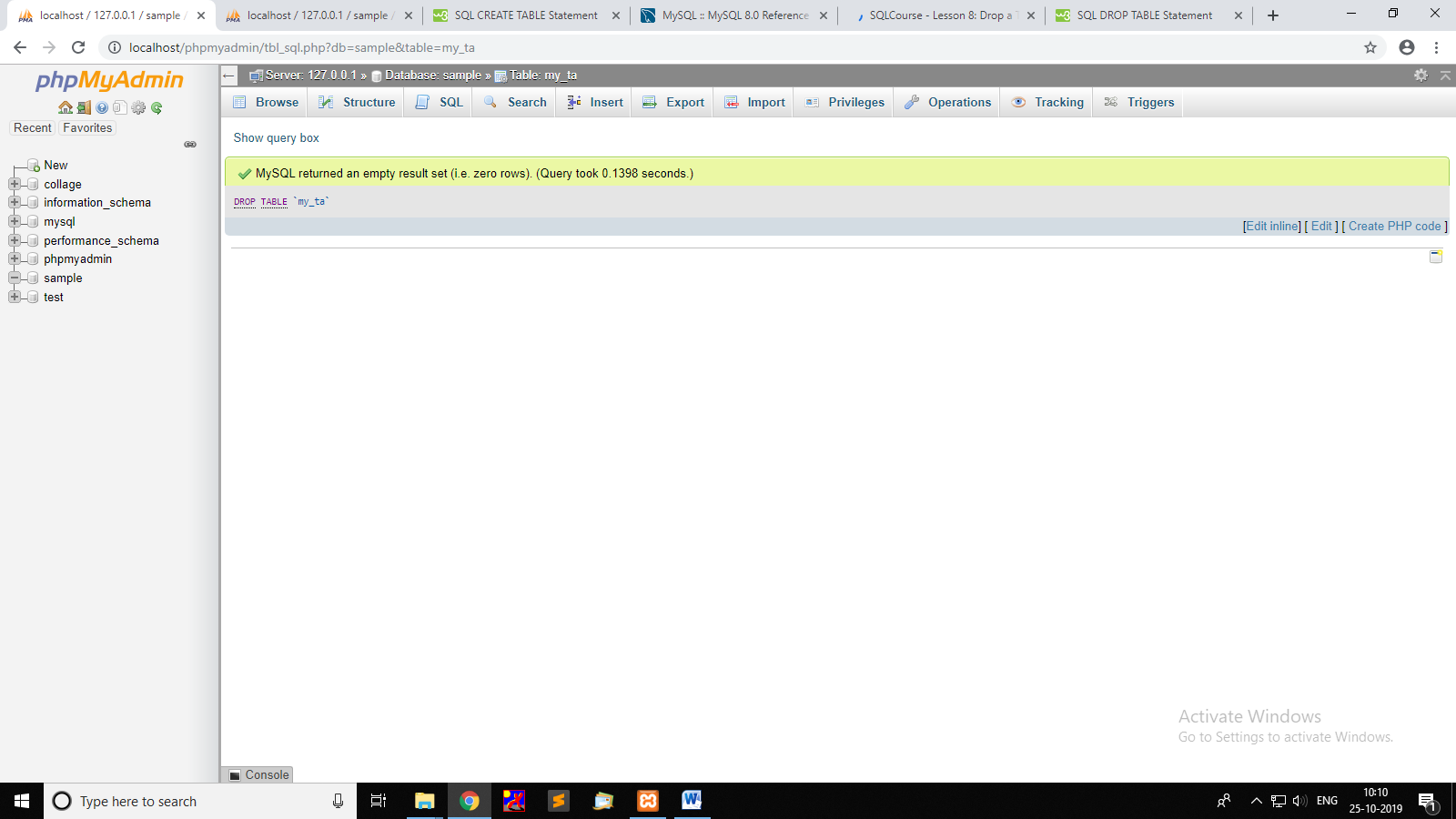
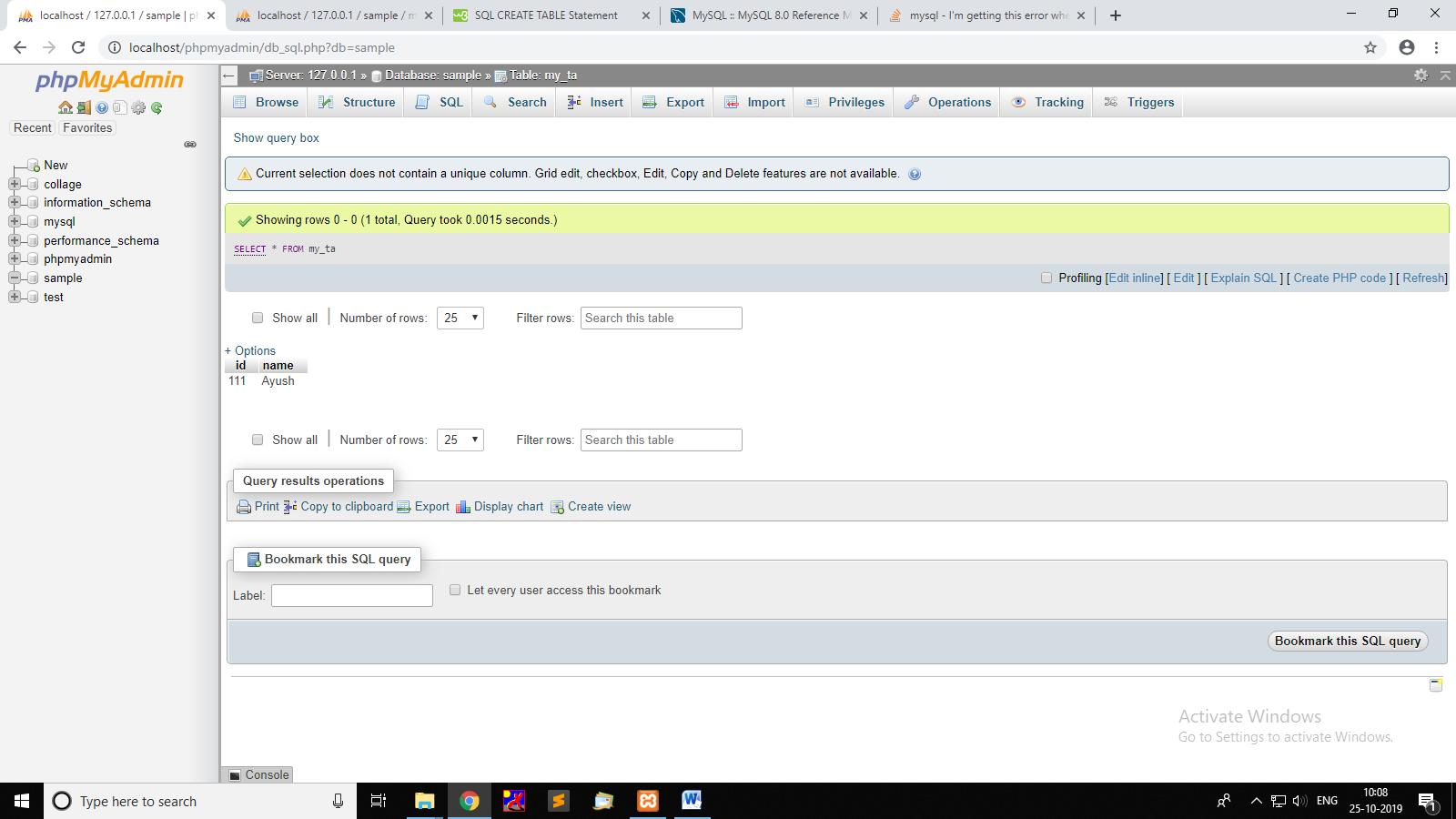
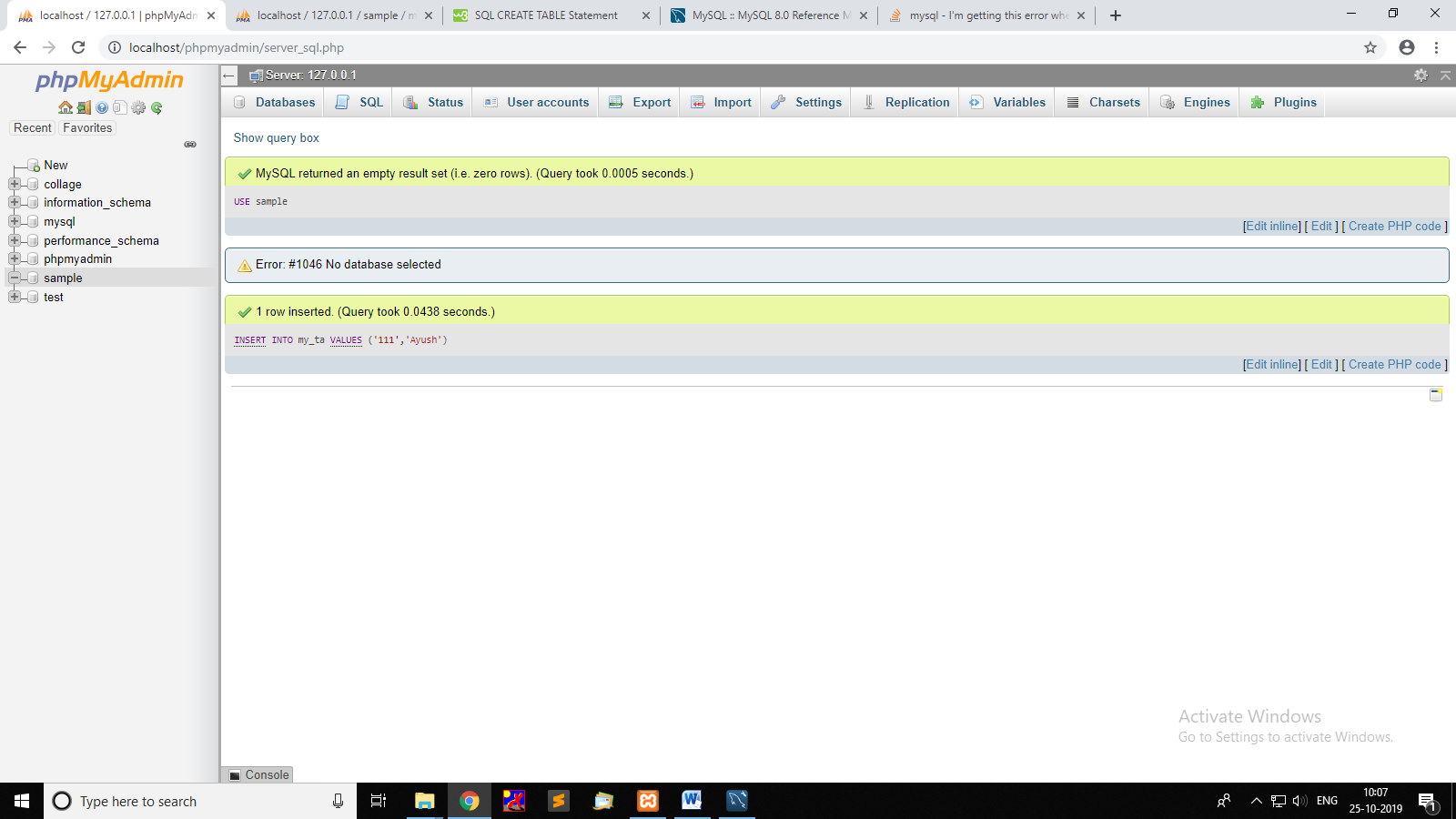
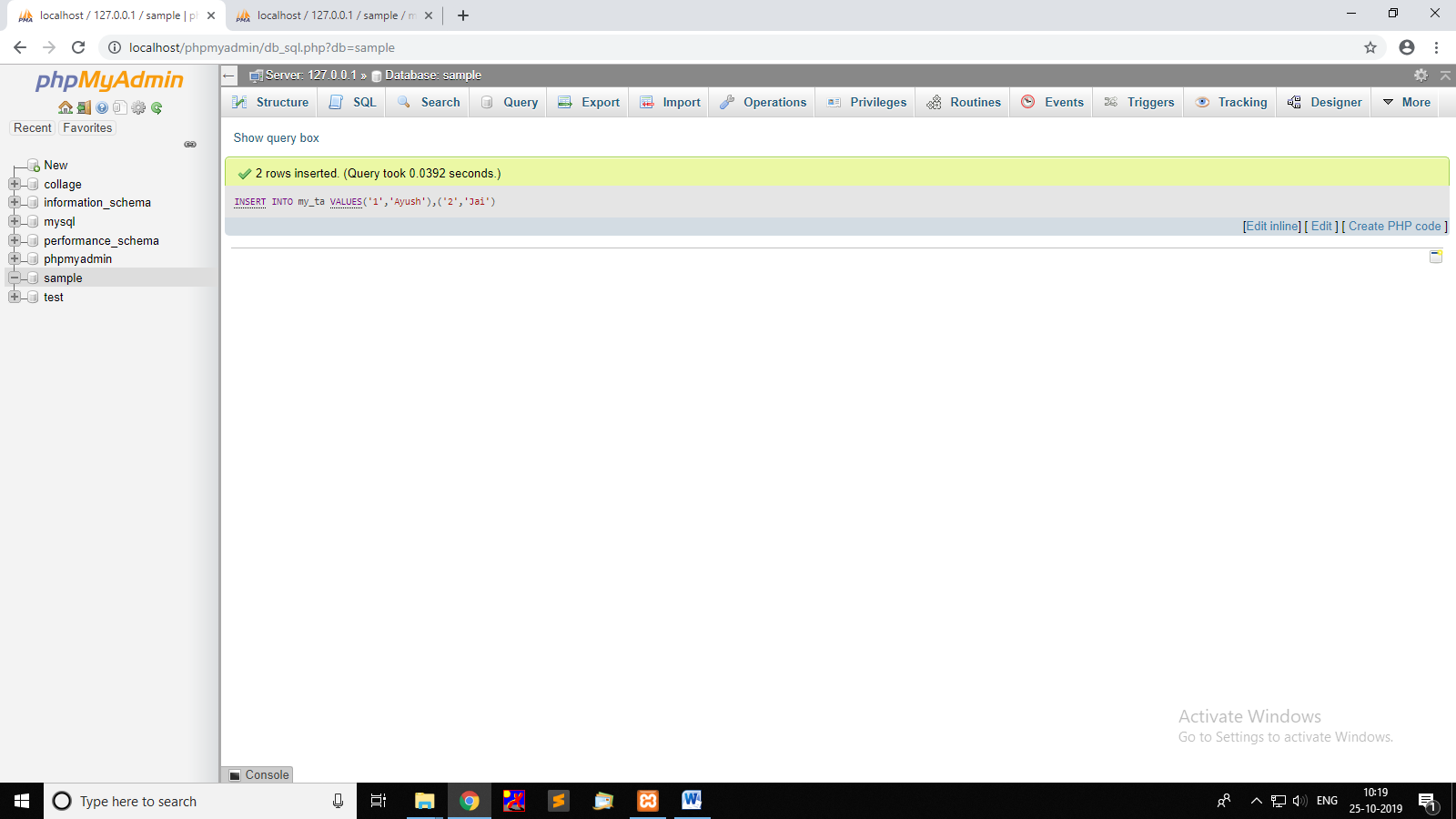
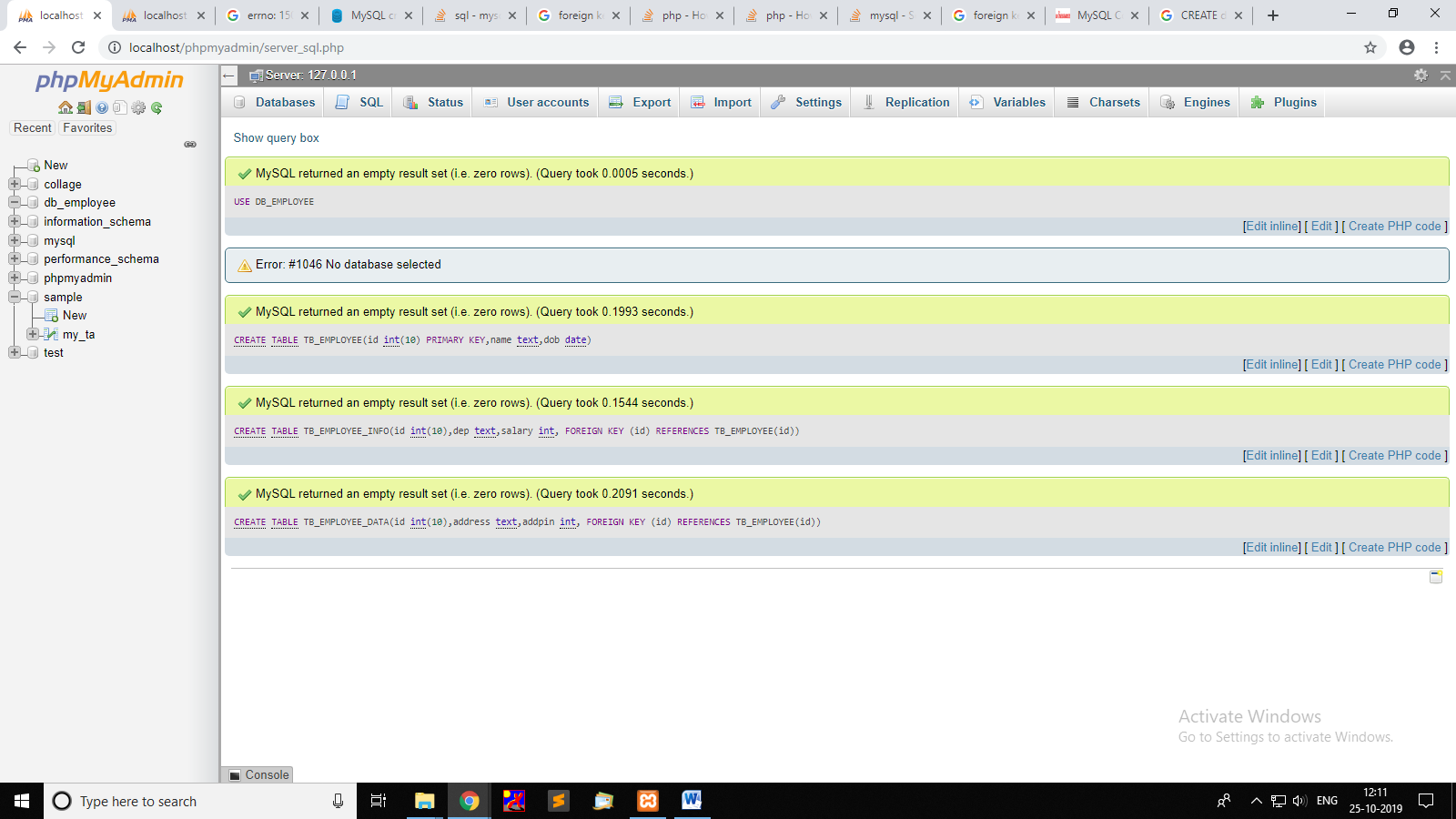
MySQL Tasks

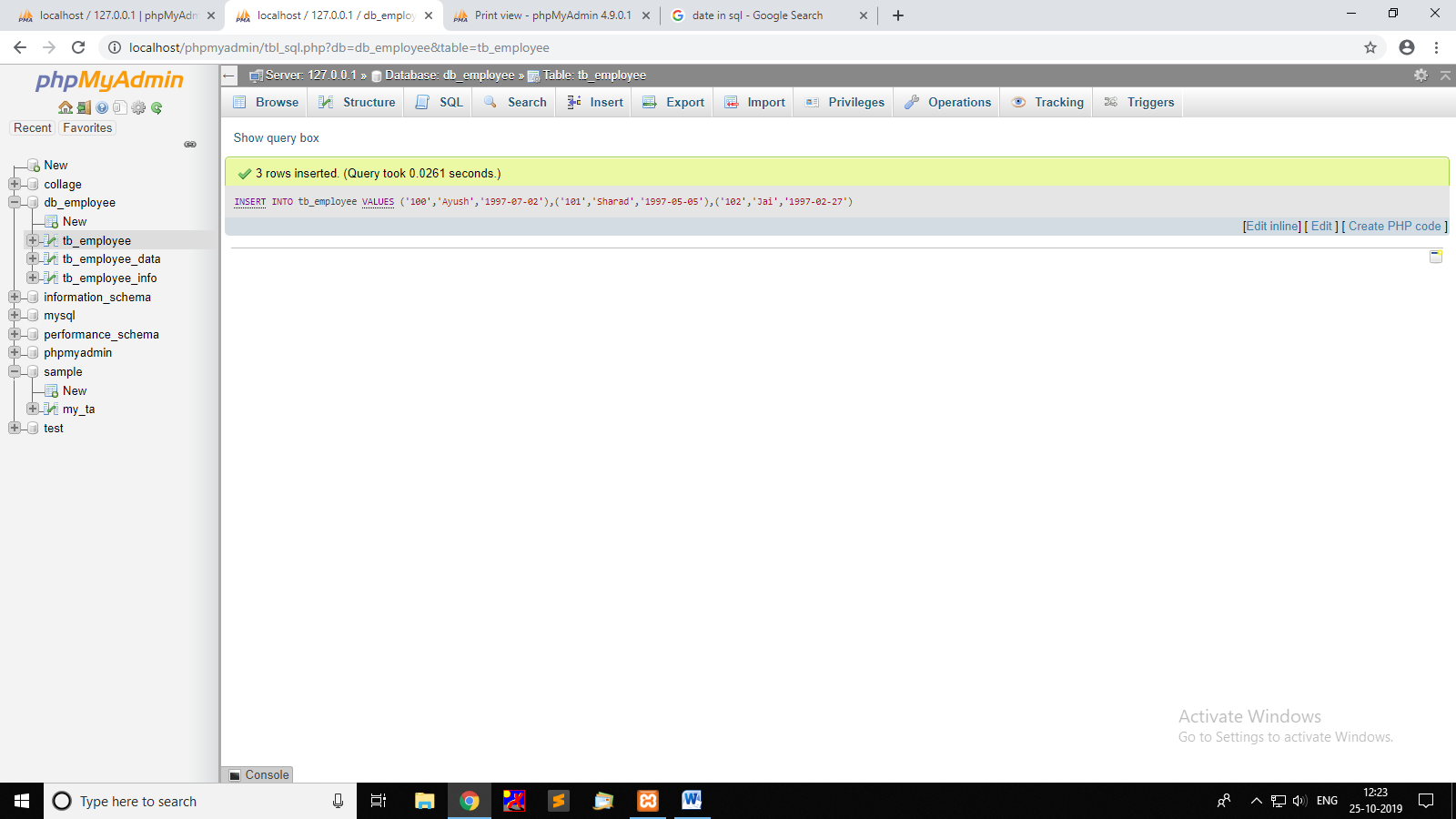
1. What is the difference between DBMS vs RDBMS.  
   IN DBMS data is stored in files while   
   IN RDBMS data is stored in form of tables which can be related.
2. List the different databases used  
   Microsoft Access  
   Microsoft Excel  
   Microsoft SQL Server  
   MySQL  
   Oracle RDBMS  
   Quick Base  
   Hadoop  
   BigData
3. Define a database, table & column  
   A database consists of one or more tables. Each table is made up of rows and columns.
4. Write the syntax to create a database and to select the database

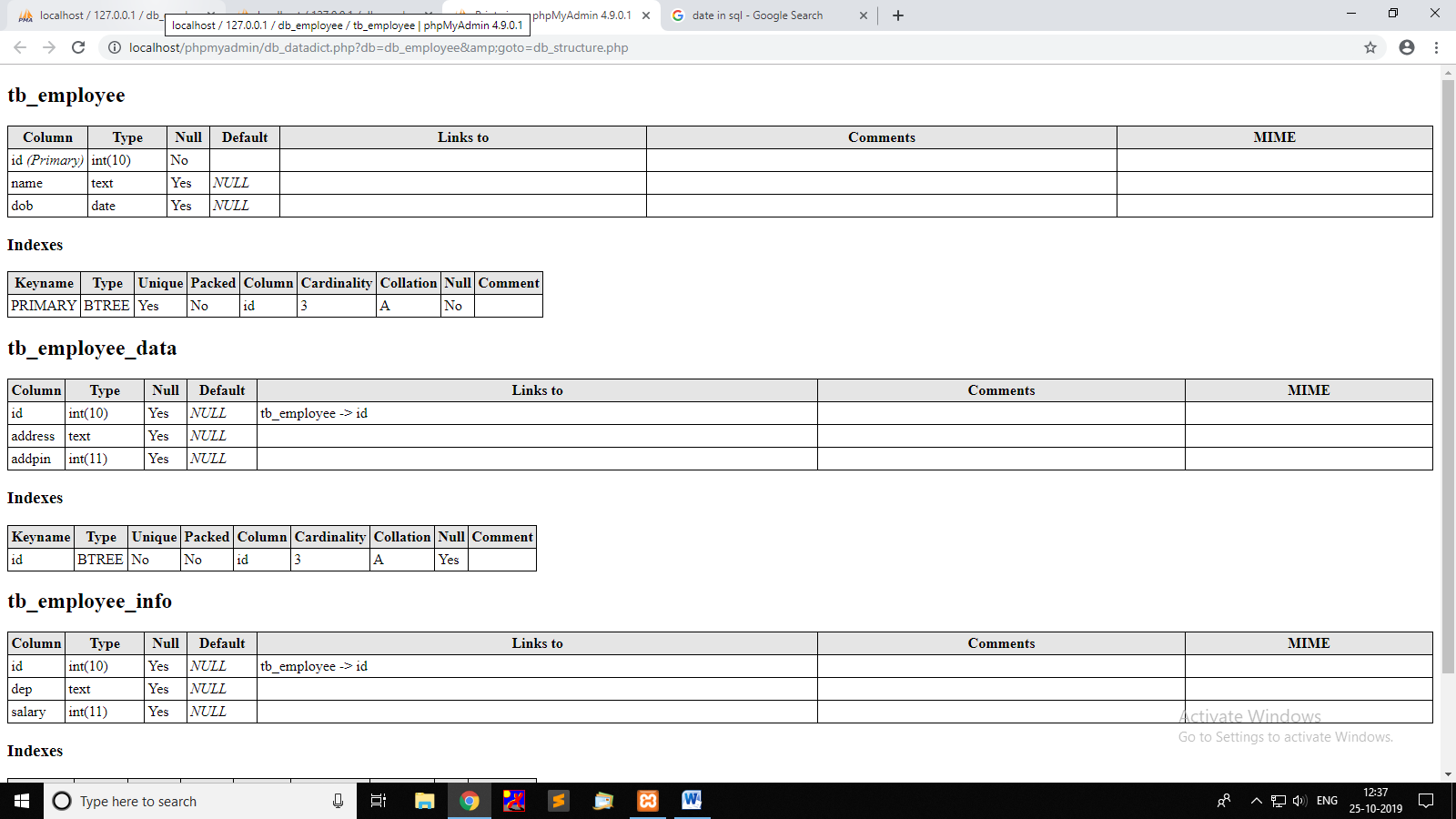
CREATE database *databasename*USE *databasename*

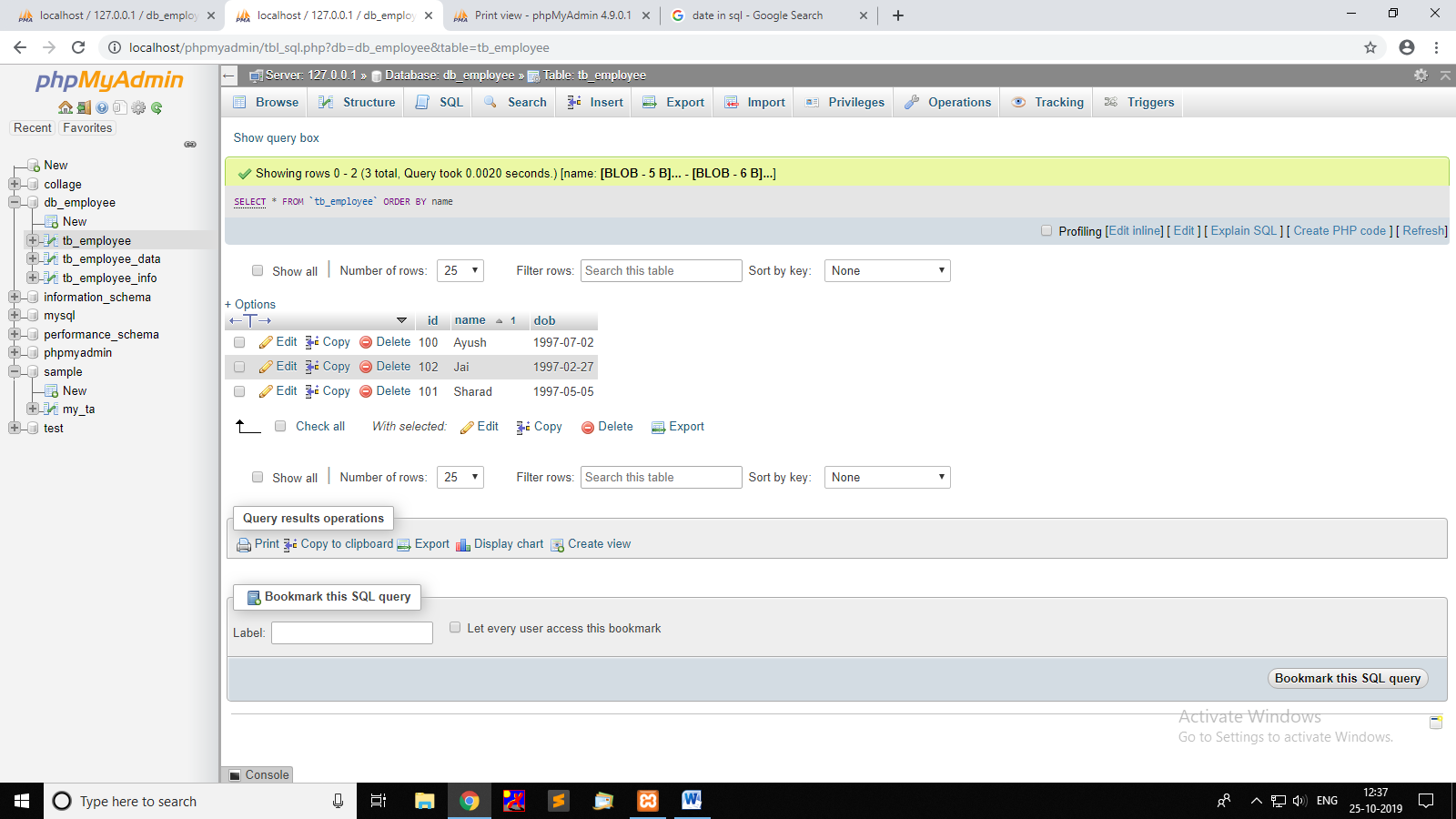
1. Write the syntax to create a table  
   CREATE TABLE *tablename*
2. List the DDL & DML statements  
   DDl: Create, Alter, Drop, Truncate, Rename

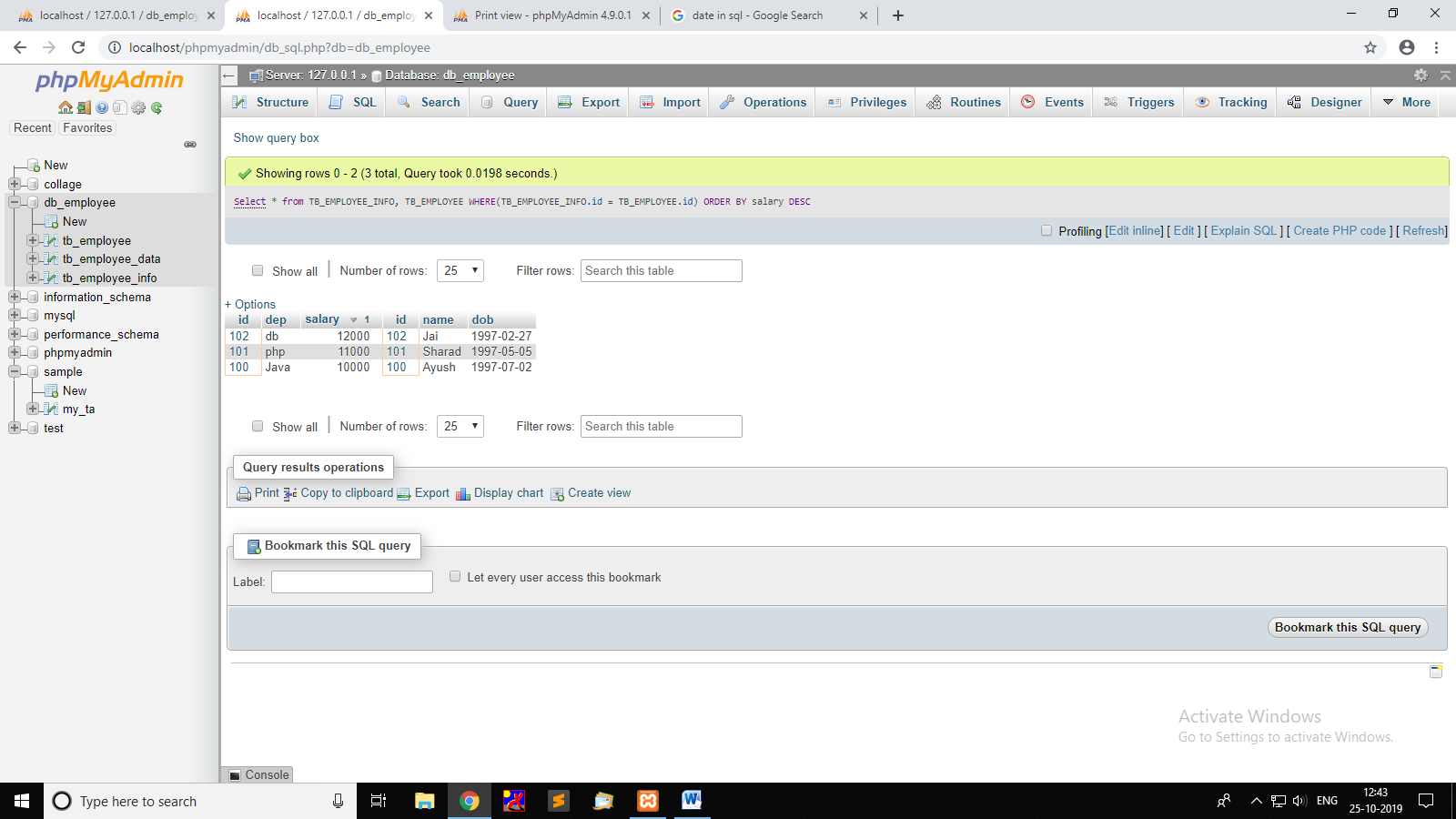
DML: Select,Insert,Update,Delete

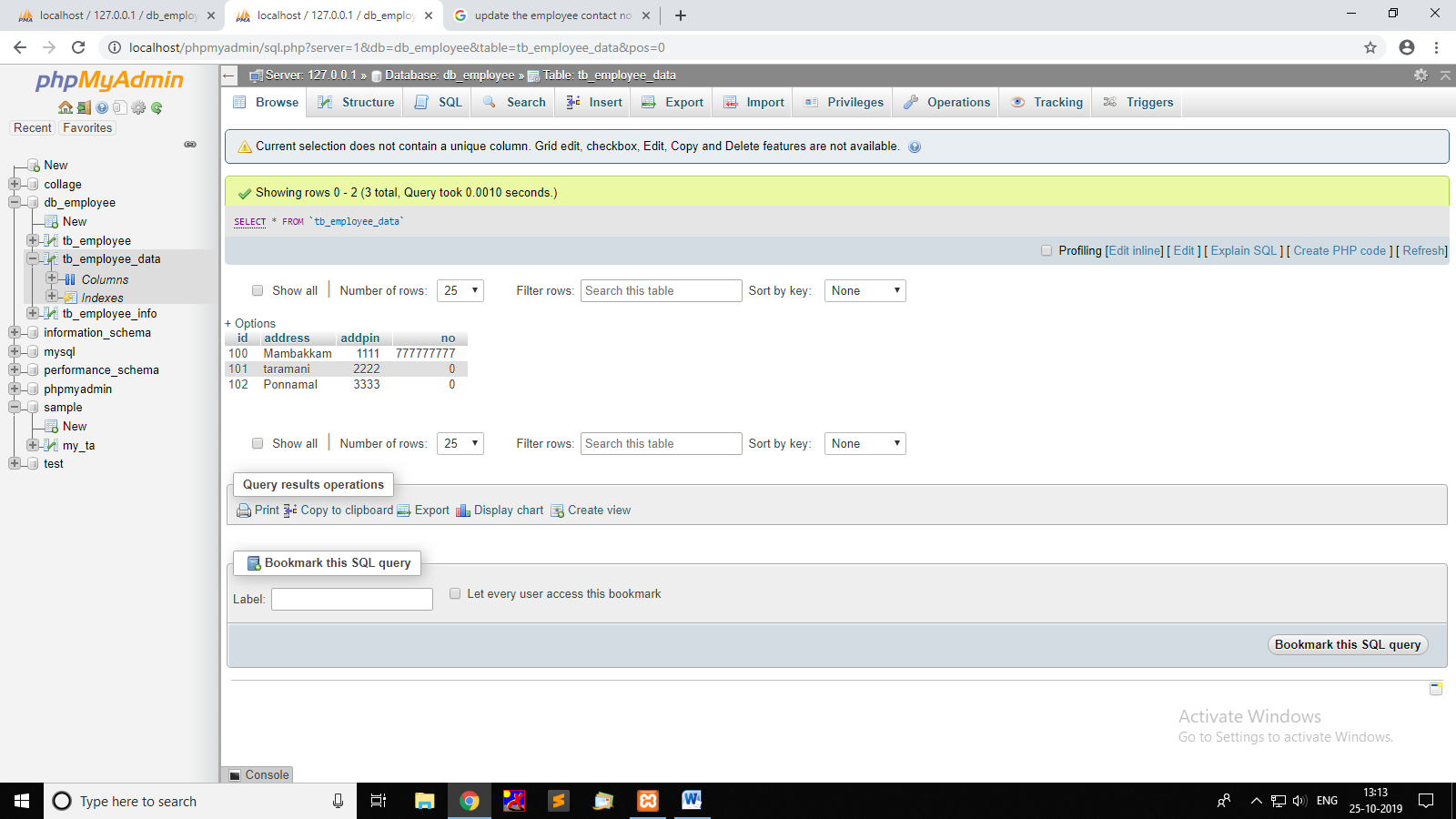
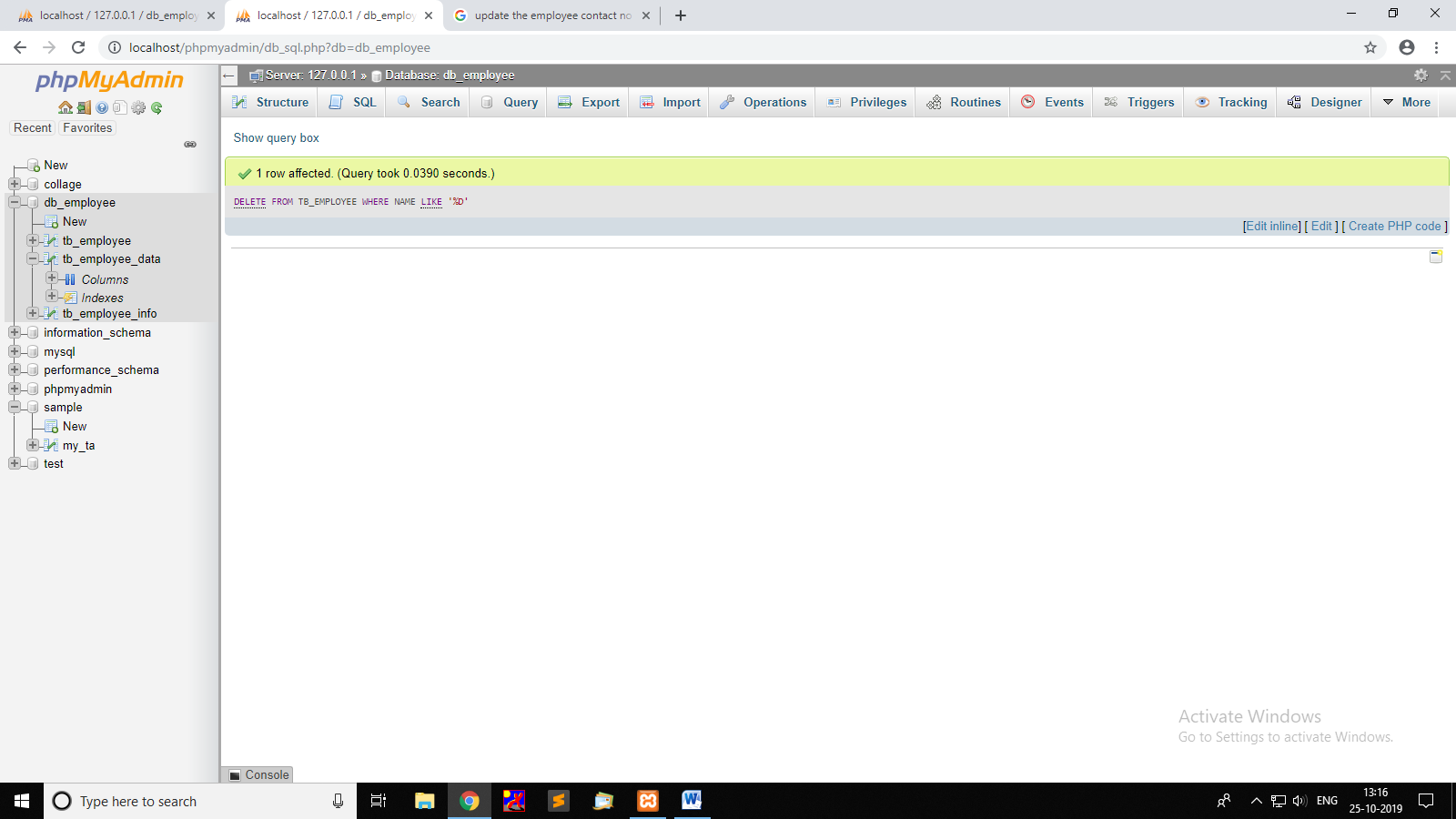
1. List the difference between Delete & Truncate  
   Delete can rollback  
   while Truncate cannot.
2. Write the syntax of Insert, Delete & Select  
   Select \* from *tabelname*Insert INTO *TABLENAME* VALUES (*V1,V2,V3…..)*DROP TABLE *TABLENAME*
3. Write a query to insert 3 rows in a table  
   Insert INTO *TABLENAME* VALUES   
   (*V11,V12,V13…..),*(*V21,V22,V23…..),*(*V31,V32,V33…..);*
4. List the difference between Insert & Update  
   Insert will create new rows while  
   Update modifies the previous inserted rows.
5. List the datatypes used in MySQL  
   INT  
   VARCHAR  
   TEXT  
   DATE  
   NUMERIC  
   DATE & TIME  
   STRING  
   SPATIAL  
   JSON
6. What is a Join & mention the different types of Joins  
   It is used to combine two or more tables   
   INNER JOINT  
   LEFT JOINT  
   RIGHT JOINT  
   OUTER JOINT
7. What is the aggregate function & mention some functions along with the purpose  
   Pre-defined functions   
   AVG  
   COUNT  
   MIN  
   MAX  
   SUM
8. Create a database for employee management & create the tables accordingly  
   CREATE database DB\_EMPLOYEE  
   CREATE TABLE *TB\_EMPLOYEE*CREATE TABLE *TB\_EMPLOYEE\_INFO*CREATE TABLE *TB\_EMPLOYEE\_DATA*

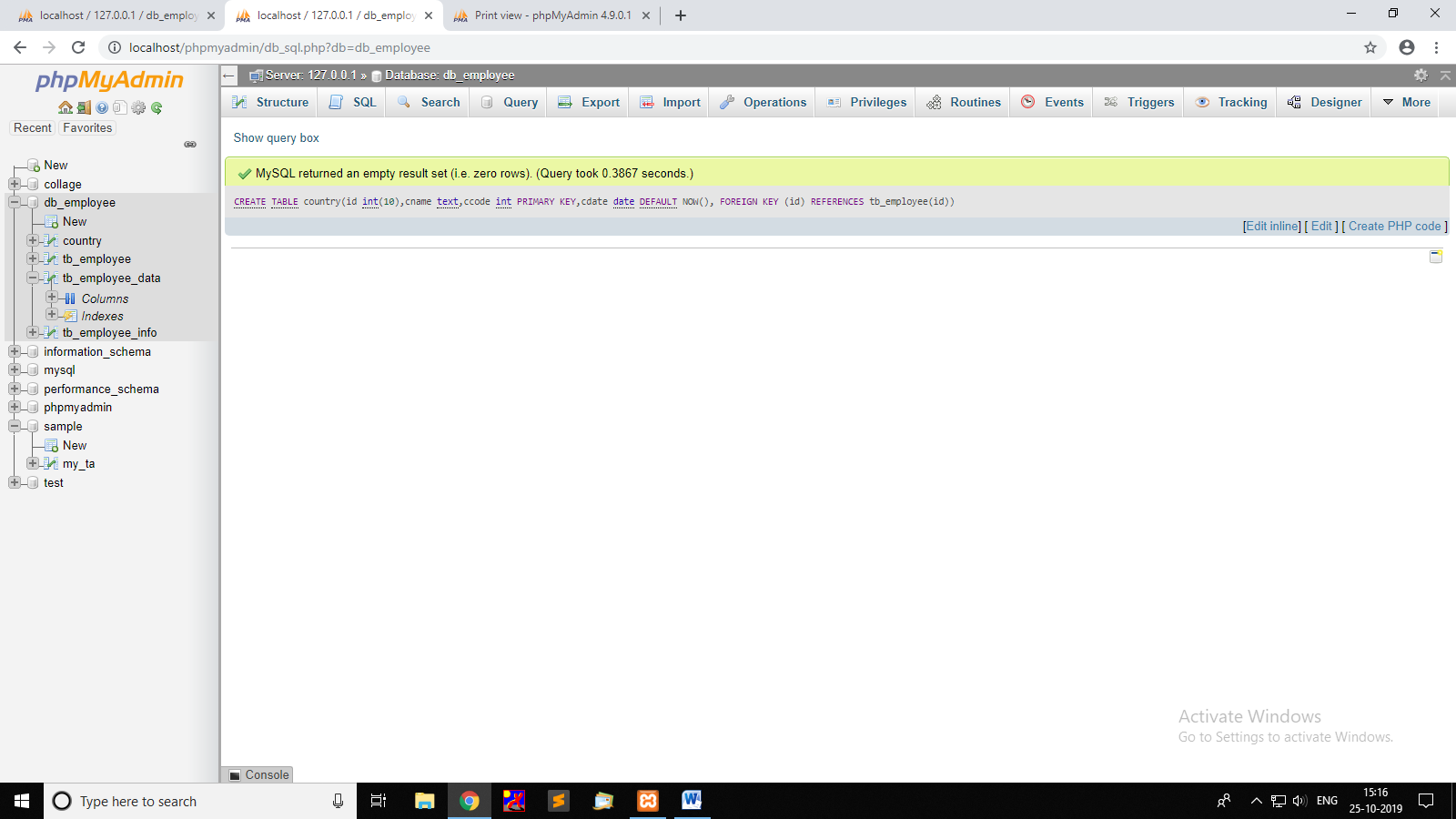




1. From the database created in Question 13, list the employees information in ascending order  
   Select \* from TB\_EMPLOYEE   
   ORDER BY name;  
   
2. From the database created in Question 13, list the employees based on the salary in descending order  
   Select \* from TB\_EMPLOYEE\_INFO, TB\_EMPLOYEE WHERE(TB\_EMPLOYEE\_INFO.id = TB\_EMPLOYEE.id) ORDER BY salary DESC;



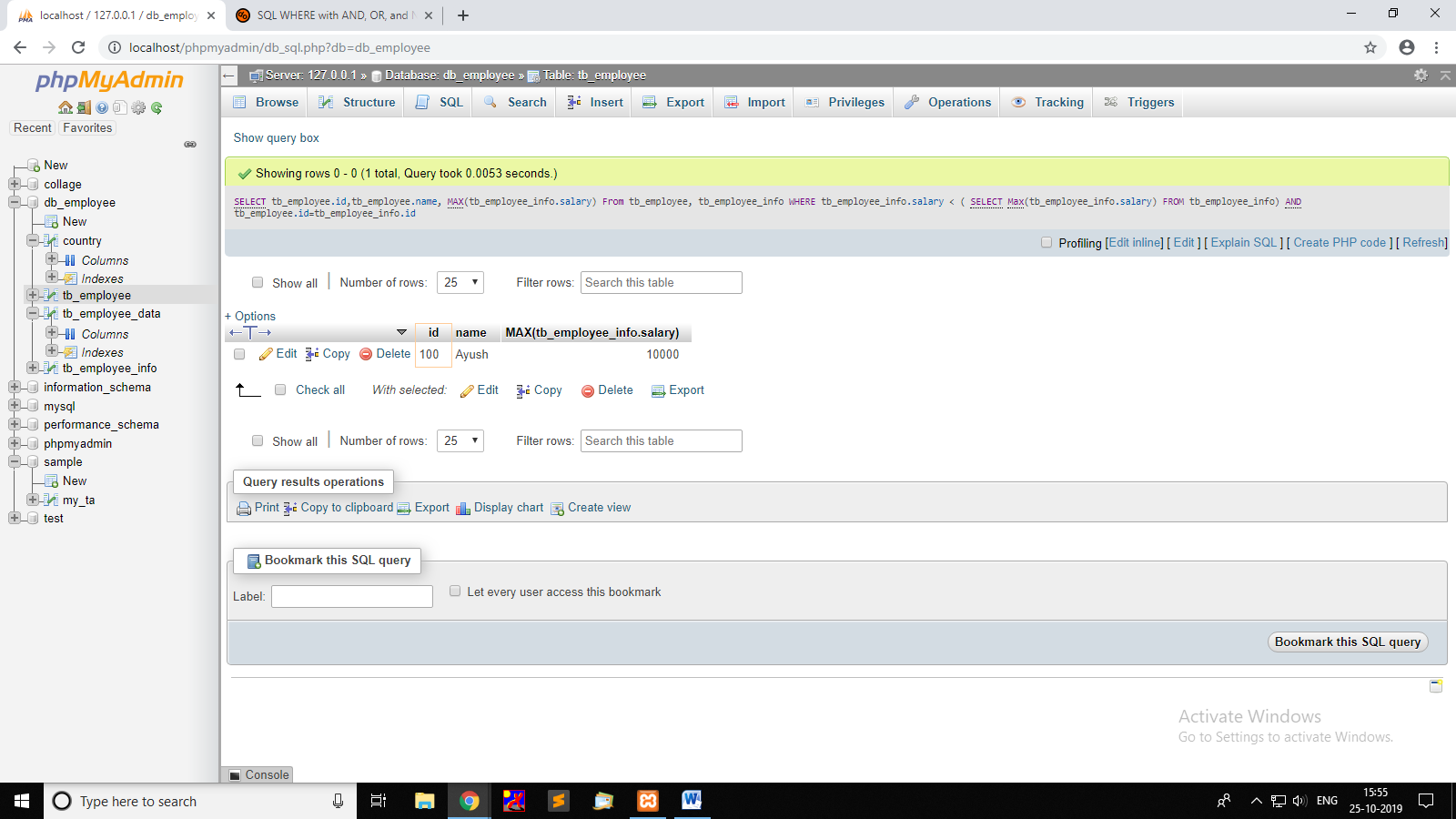
1. From the database created in Question 13, update the employee contact no based on the employee id  
   Creaation :   
   ALTER TABLE tb\_employee\_data ADD no INT(10) NOT NULL ;  
     
   UPDATE tb\_employee\_data SET no='777777777' WHERE id = '100'  
   
2. From the database created in Question 13, delete the employees who have the name starting with ‘D’. ( All the related information has to be deleted)  
   DELETE FROM TB\_EMPLOYEE WHERE NAME LIKE '%D';  
     
   #ignore foreign key  
   
3. Create a country table with the below columns and insert some valid data.
   1. Primary key
   2. Country Name
   3. Country Code
   4. Date of creation
   5. Reference of the user created

CREATE TABLE country(id int(10),cname text,ccode int PRIMARY KEY,cdate date DEFAULT NOW(), FOREIGN KEY (id) REFERENCES tb\_employee(id));  
  


1. Write a simple function to list the country code & country name  
   SELECT country\_code, country\_name   
   CASE WHEN country\_code = 'US' then country\_name ='United States'  
   WHEN country\_code = 'CA' then country\_name ='Canada'  
   WHEN country\_code = 'IN' then country\_name ='India'  
   END, FROM COUNTRY

1. Write a query to select the employee who received the second highest salary  
   concept sub query

SELECT tb\_employee.id,tb\_employee.name, MAX(tb\_employee\_info.salary) From tb\_employee, tb\_employee\_info WHERE tb\_employee\_info.salary < ( SELECT Max(tb\_employee\_info.salary) FROM tb\_employee\_info) AND tb\_employee.id=tb\_employee\_info.id ;



1. Create the tables for State, City and relate the same with Employee management  
     
   CREATE TABLE AREA(code number primarykey, state varchar(20), city varchar(20));  
     
   Select *TB\_EMPLOYEE*.name, *AREA* .code, *AREA.STATE , AREA.CITY FROM AREA , TB\_EMPLOYEE WHERE(TB\_EMPLOYEE.code== AREA* .code);
2. List the employees Country wise, State wise & City wise  
   Select *TB\_EMPLOYEE* .name, *TB\_EMPLOYEE\_INFO* .country, *TB\_EMPLOYEE\_INFO* .state, *TB\_EMPLOYEE\_INFO* .city from TB\_EMPLOYEE , *TB\_EMPLOYEE\_INFO*;
3. What is a DB routine? Mention the purpose of using it.

It’s a kind of procedure that have predefined logic and can be called within select statement .

1. Write the syntax of Stored Procedure, Function & View  
   Procedure:  
   CREATE PROCEDURE procedure\_name  
   AS  
   sql\_statement  
   GO;

CREATE FUNCTION function\_name

[(i [IN | OUT | IN OUT] type [, ...])]

RETURN return\_datatype

{IS | AS}

BEGIN

function\_body

END [function\_name];

View:

CREATE PROCEDURE n1 @City nvarchar(30), @PostalCode nvarchar(10)

AS

SELECT \* FROM n1 WHERE City = @City AND PostalCode = @PostalCode

GO;

1. What is the difference between Stored Procedure & Function  
   The function must return a value but in Stored Procedure it is optional , a procedure can return zero or n values. Functions can have only input parameters for it whereas Procedures can have input or output parameters
2. Create a stored procedure to perform the DML operations  
   CREATE PROCEDURE SelectAllEmployees  
   AS  
   SELECT \* FROM Employees  
   GO;
3. Create a stored procedure to visualize a employee information  
   CREATE PROCEDURE SelectAllEmployees  
   AS  
   SELECT \* FROM Employees  
   GO;