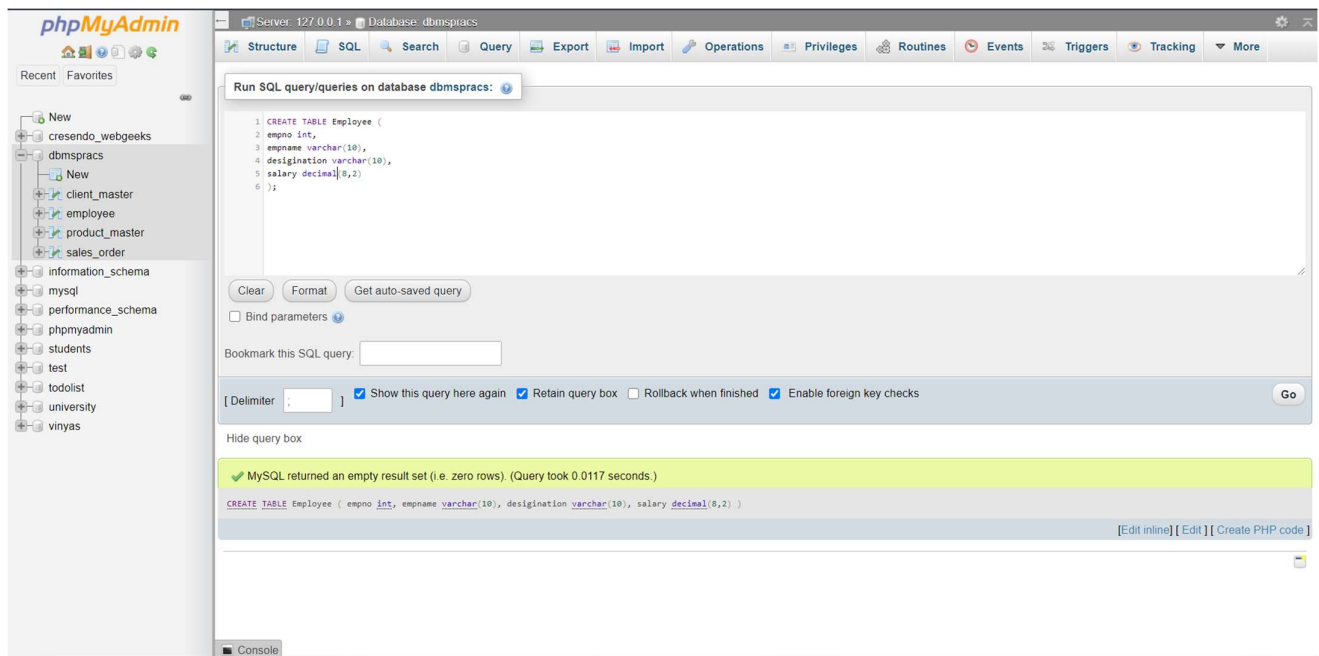# DBMS Practical Implementation, Lab 5 – 1.
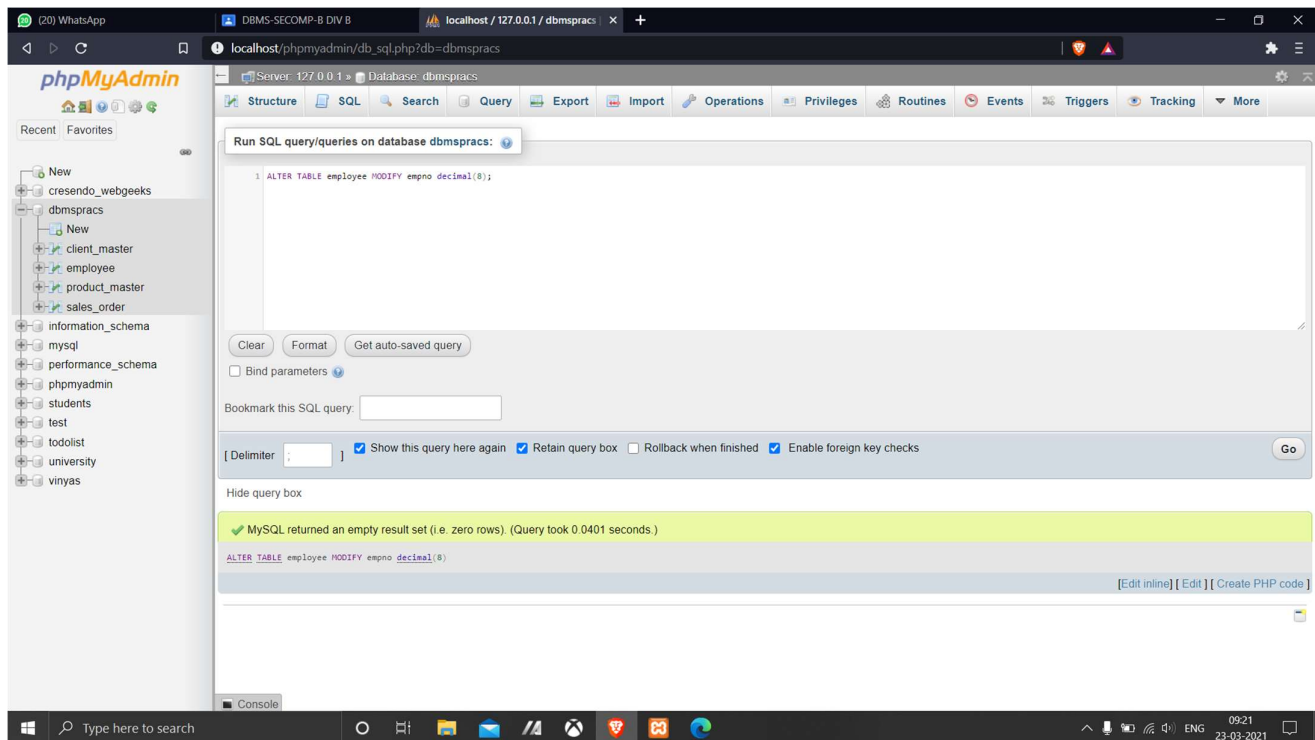
1. To Create Table:

CREATE TABLE Employee (
empno int,
empname varchar(10),
desigination varchar(10),
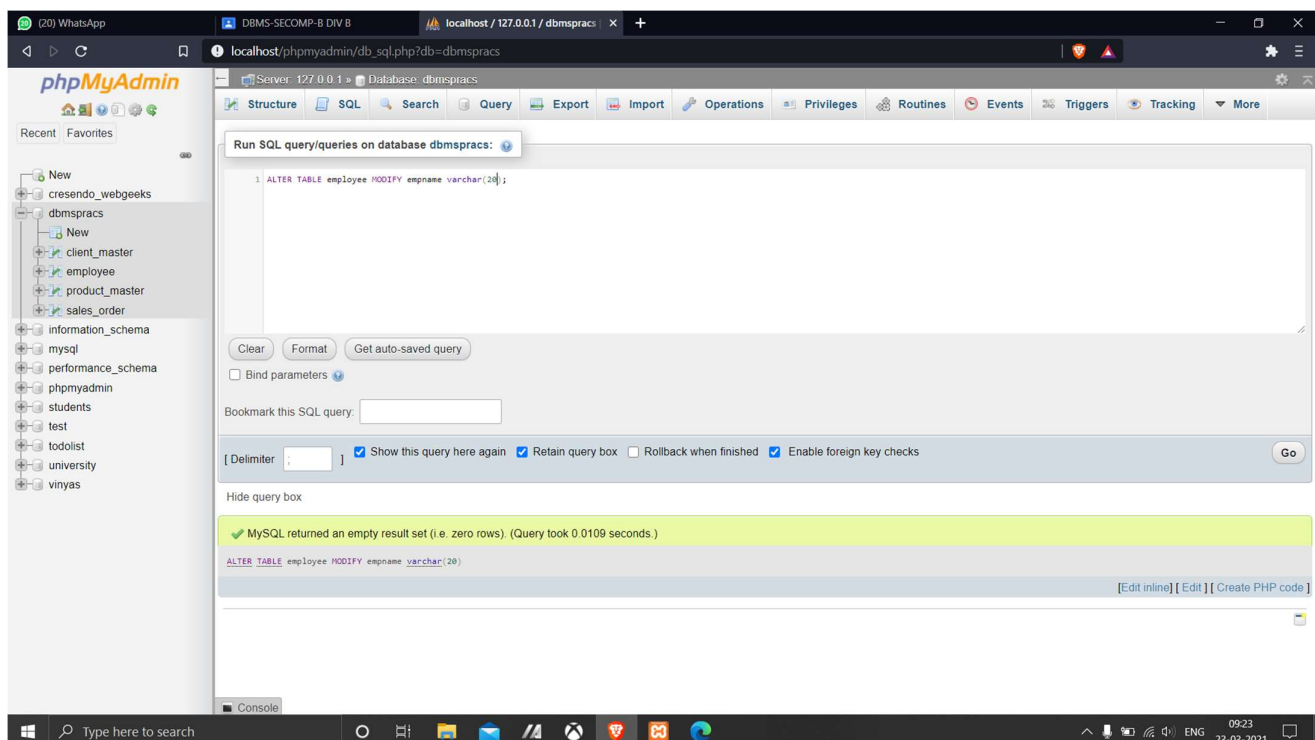salary decimal(8,2)
);

2. Write a Query to Alter the column empno to empno number (6).
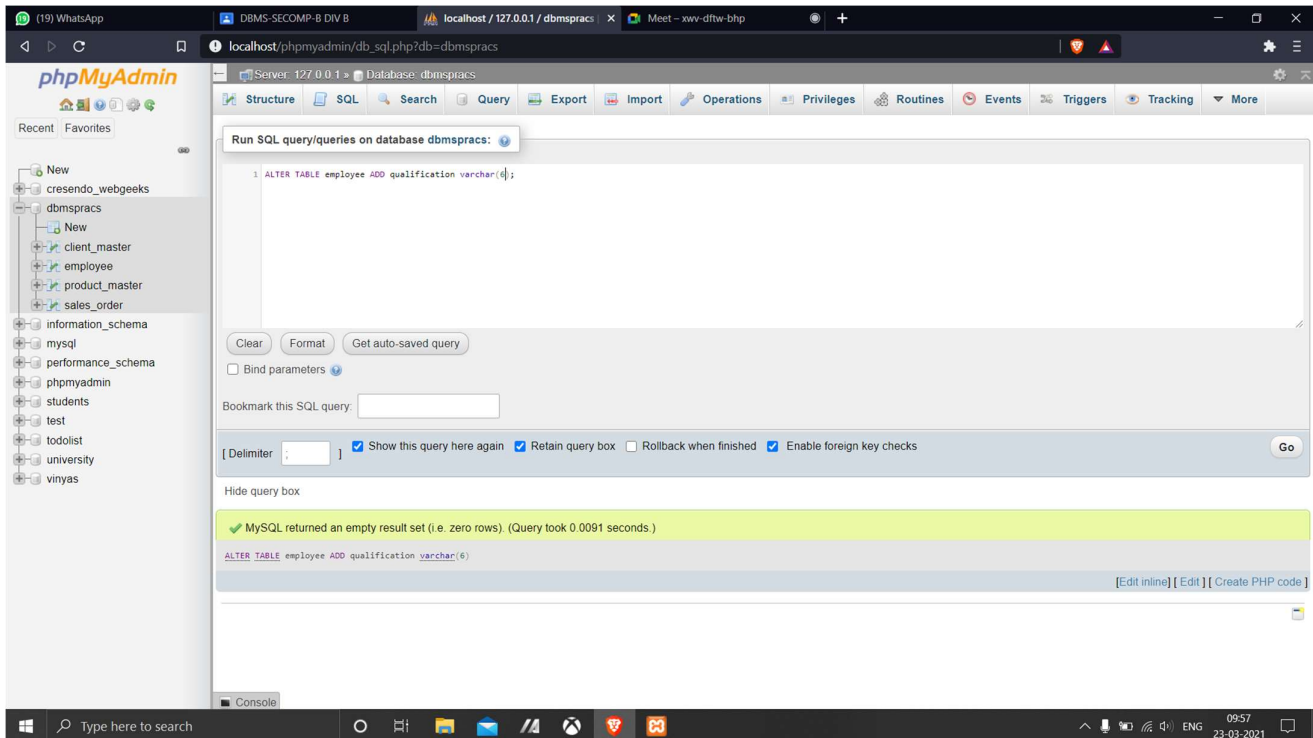
ALTER TABLE employee MODIFY empno decimal(8);

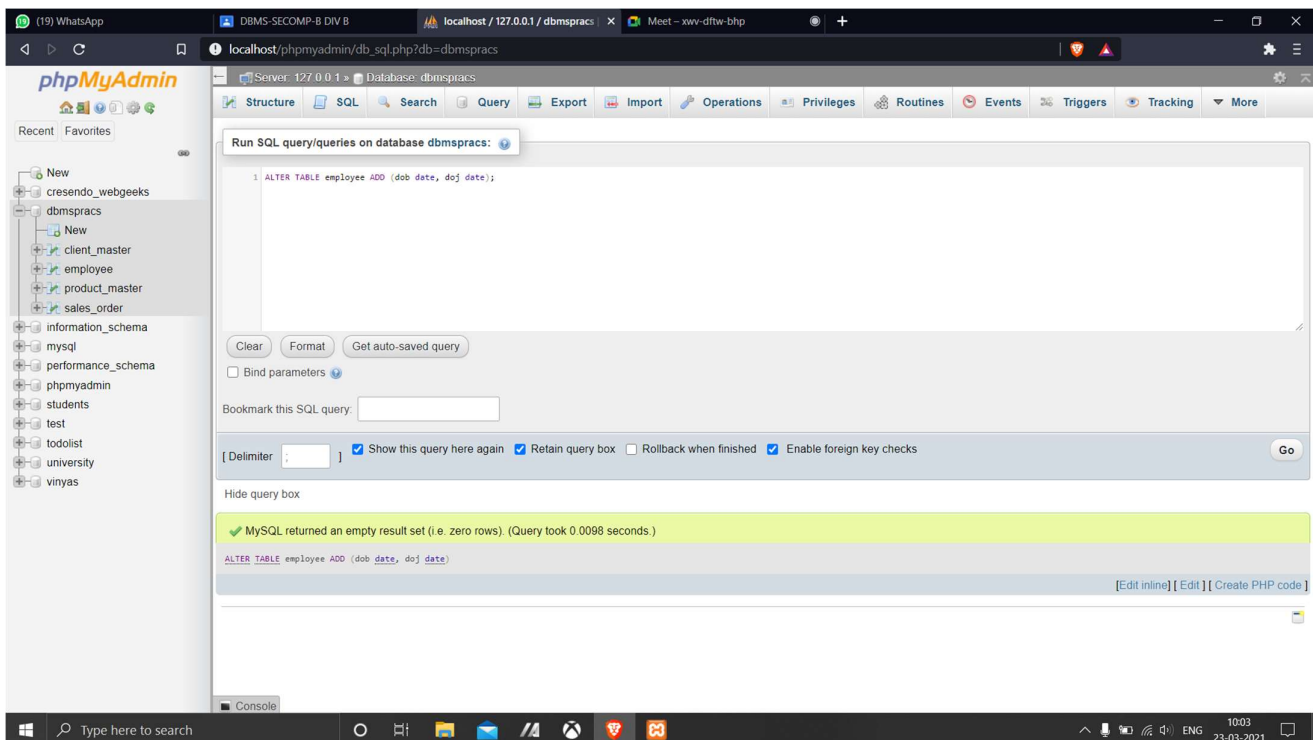## 3. Write a Query to Alter the table employee with multiple columns (empno, ename.)

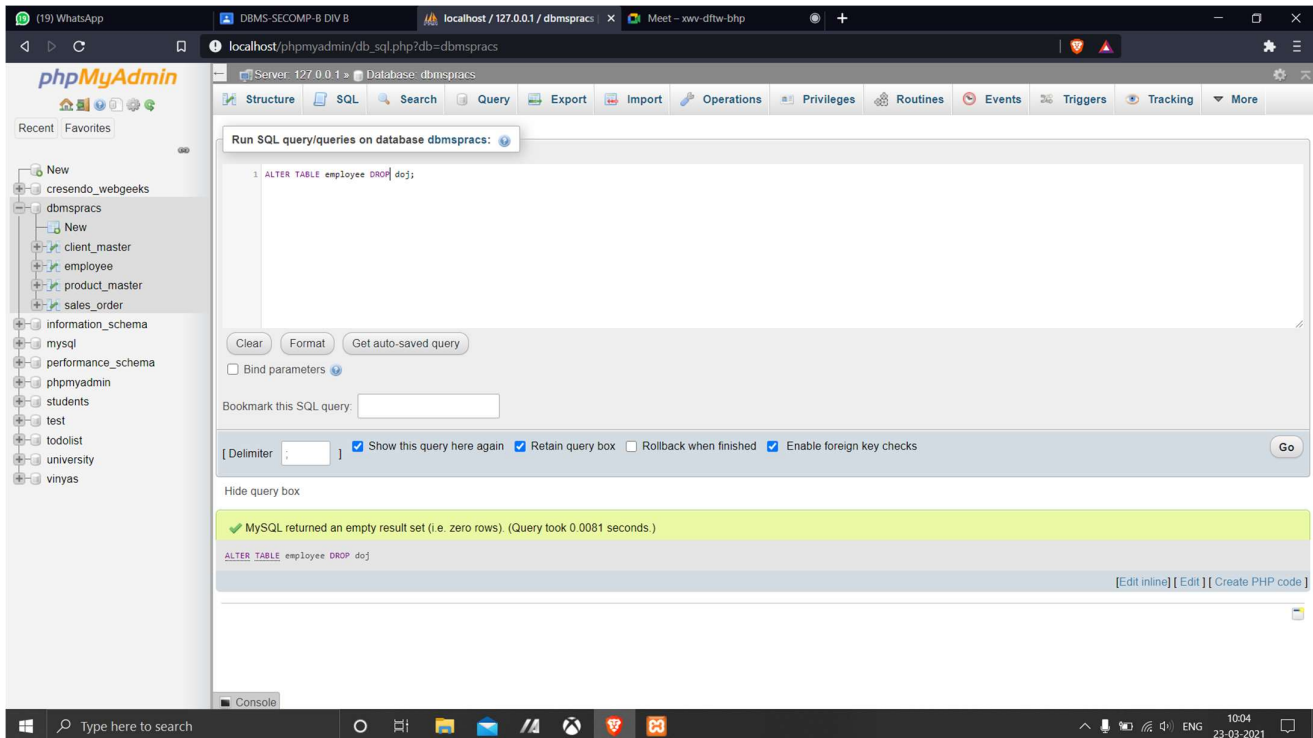ALTER TABLE employee MODIFY empname varchar(20);

4. Write a query to add a new column in to employee as qualification varchar(6)
ALTER TABLE employee ADD qualification varchar(6);
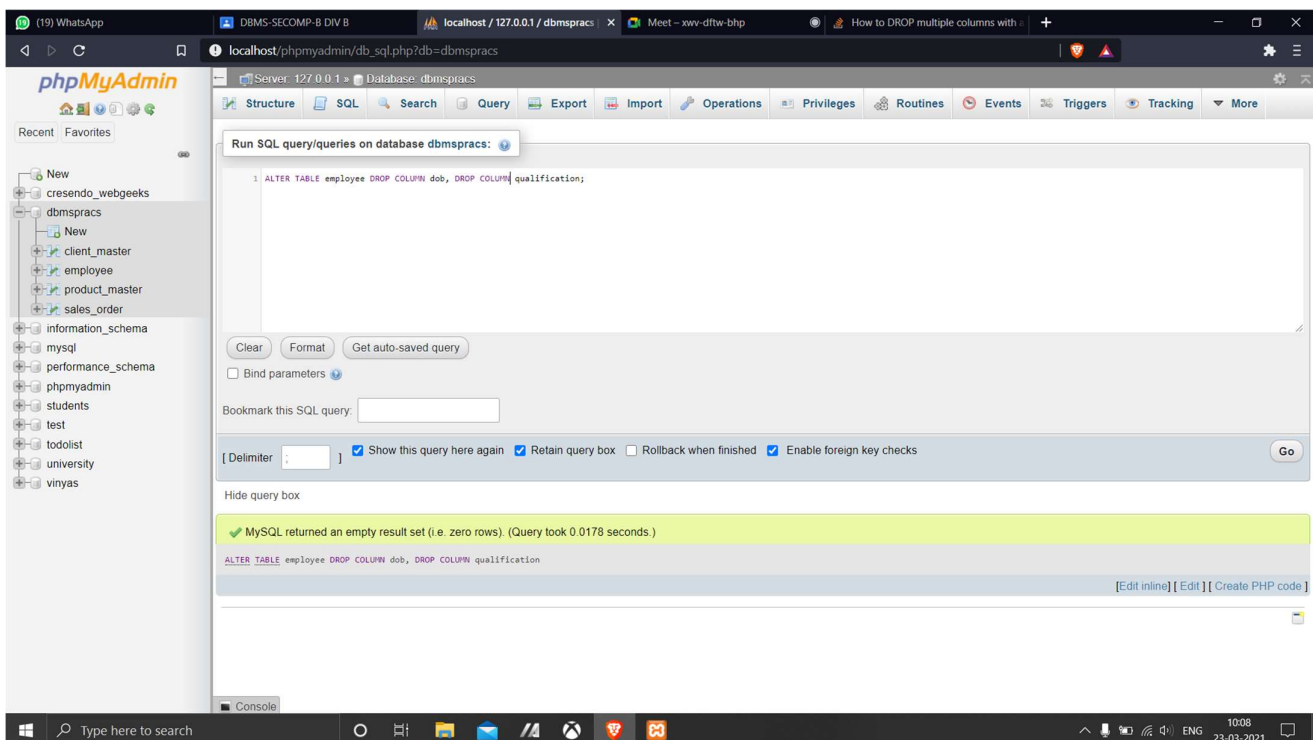

5. Write a query to add multiple columns in to employee dob date, doj date
ALTER TABLE employee ADD (dob date, doj date);

6. Write a query to drop a column 'doj' from an existing table Employee

ALTER TABLE employee DROP doj;

7. Write a query to drop multiple columns 'dob' and 'qualification' from employee

ALTER TABLE employee DROP COLUMN dob, DROP COLUMN qualification;

8. Insert some records in table

INSERT INTO employee VALUES (1001,"shah rajesh", "manager", 46500);

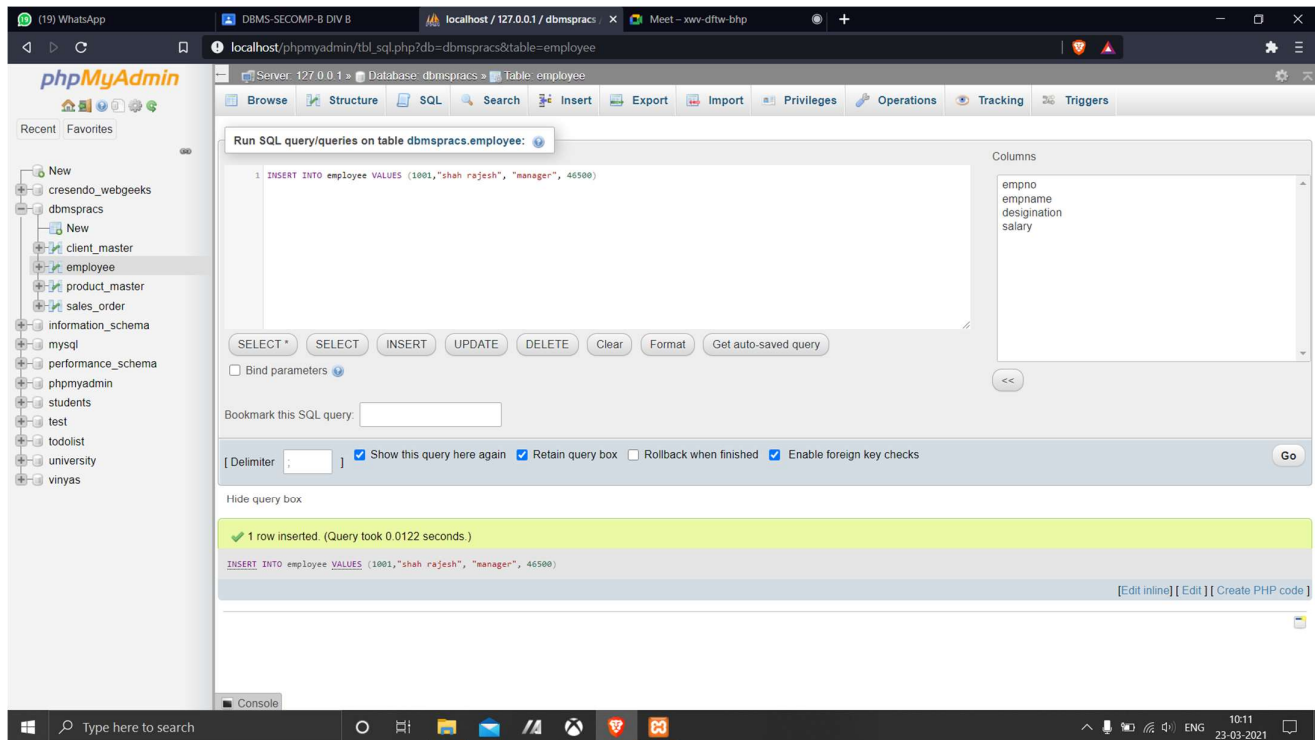INSERT INTO employee VALUES (1002,"shah jayesh","cs engineer", 36500);

INSERT INTO employee VALUES (1003,"shah ramesh", "Hr manager", 30000);
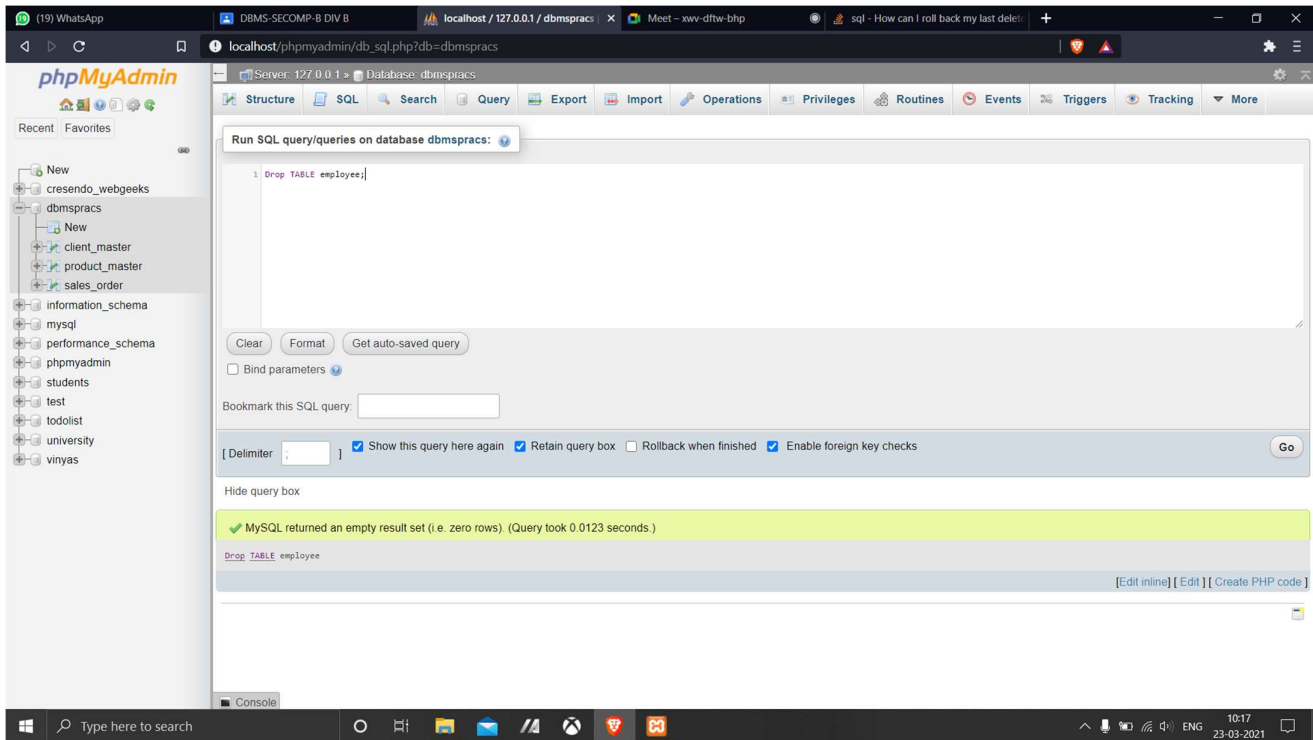
INSERT INTO employee VALUES (1004,"shah suresh", "networking", 35000);

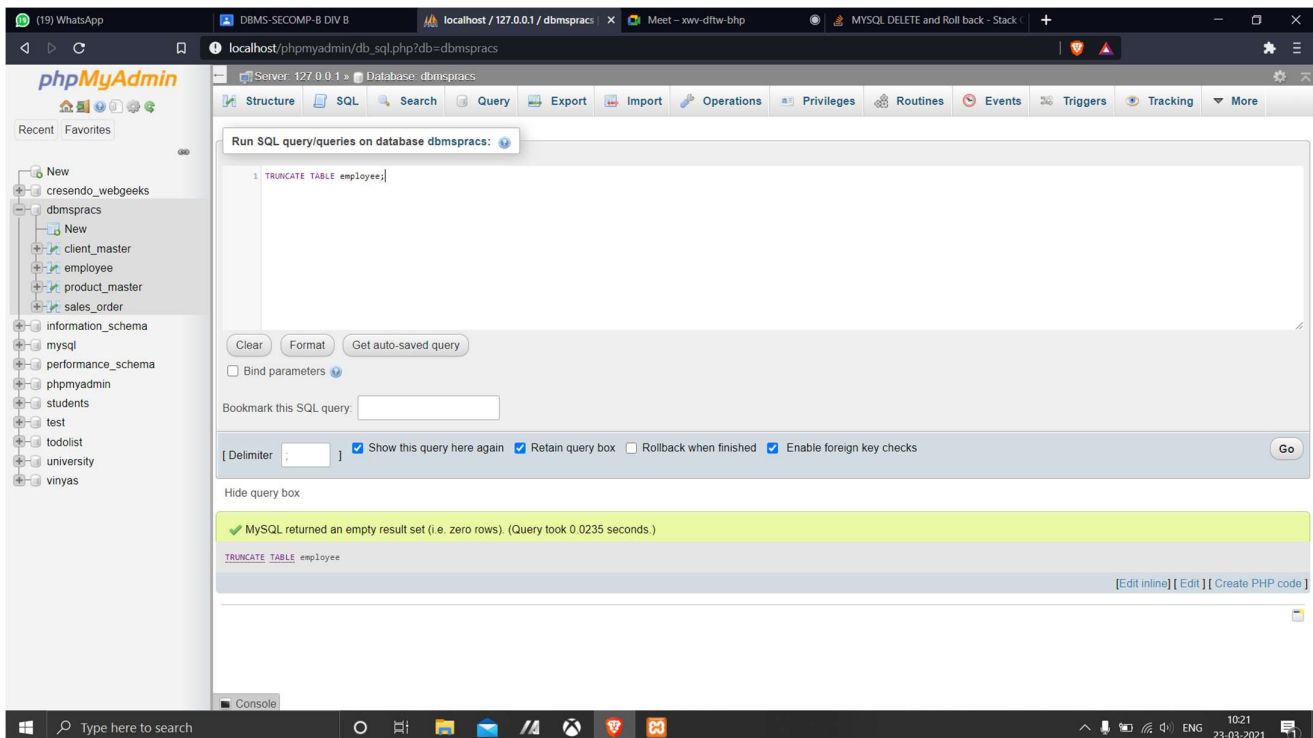INSERT INTO employee VALUES (1005,"shah mahesh", "janitor", 25000);

9. Truncate table EMP
DROP TABLE employee;

10. Drop table EMP
TRUNCATE TABLE employee;

(1) What is a Data Dictionary?

Ans: A data dictionary contains metadata i.e data about the database. The data dictionary is very important as it contains information such as what is is the database, who is allowed to access it, where is the database physically stored etc. The users are not allowed to interact with data dictionary. It is only handled by the database administrators.

The data dictionary in general contains information about the following.

(i) Names of all the database tables and their schemas.

(ii) Details about all the tables in the database, such as their owners, their security constraints, when they are created.

(iii) Physical information about the tables such us where they are Stored and how

(iv) Table constraints such as primary key, key attributes, foreign key information etc.

(v) Information about the database views that are visible.

(2) what are database schema.

Ans: A database schema is a skeleton structure that represents the logical view of the entire database. It defines how the data is organised and how the relations among them are associated. It formulates all the constraints that are to be applied on the data.

A database schema defines its entities and the relationship among them. It contains a descriptive detail of the database, which can be depicted by means of schema diagrams. It's the database designers who design the schema to help programmers understand the database and make it useful.

A database schema can be divided broadly into two categories

(i) Physical Database Schema:-
This schema pertains to the actual storage of data and its forms of storage like files, indexes etc. It defines how the data will be stored in a secondary storage.

(ii) Logical Database Schema:-
This schema defines all the logical constraints that need to be applied on the data stored. It defines tables, views and integrity constraints.

(3) Datatypes in MySQL :-

Ans. A database table containing multiple columns with specific data types such as numeric or string. MySQL provides more data types other than just numeric and string.

(i)   Numeric data types :-

(a) Int :- A standard integer

Range :- -2147483648 to 2147483647

(b) Float :- A single - precision floating point number.

(c) Double :- double precision floating point number.

(d) BIT :- Use to store data in bits and Binary.

(ii) String data types :-

(a) Varchar :- A variable - length non - binary string

(b) BLOB :- Stands for Binary large Object

(iii) Date data types :-

(a) Date :- A date value in CCYY - MM - DD format

(b) Time :- A time value in hh : MM : SS format

(c) Datetime :- Stores date and time in CCYY - MM - DD hh : mm : SS format

Write the effects of NULL.

The SQL NULL is the term used to represent a missing value. A NULL value in a table is a value field that appears to be blank.

→ A field with a NULL value is a field with no value. It is very important to understand that a NULL value is different than a zero value or a field that contains spaces.

The NULL value can cause problem when selecting data. However, because when comparing an unknown value to this value, the result is always unknown and not included in the result.