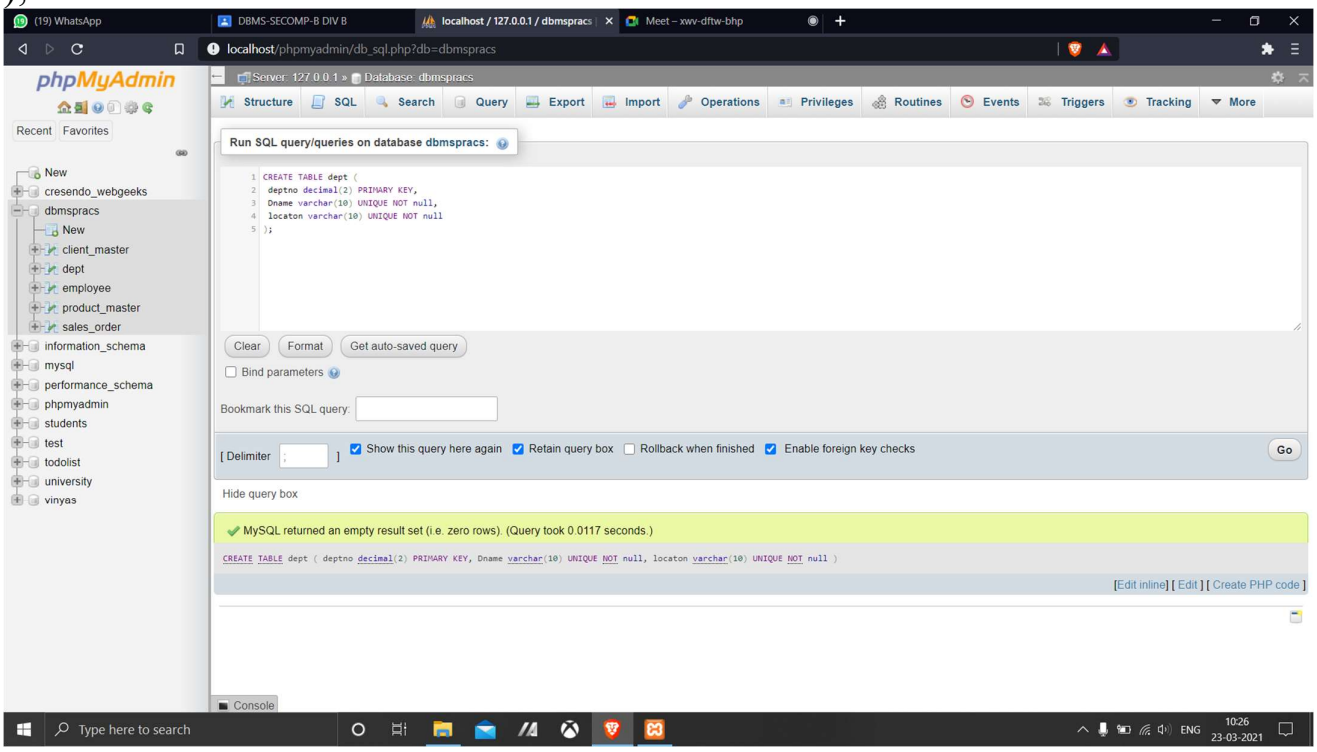
Name: Brendan Lucas, Div: SE COMP B, Roll No: 8953

DBMS Practical Implementation, Lab 5 – 2.

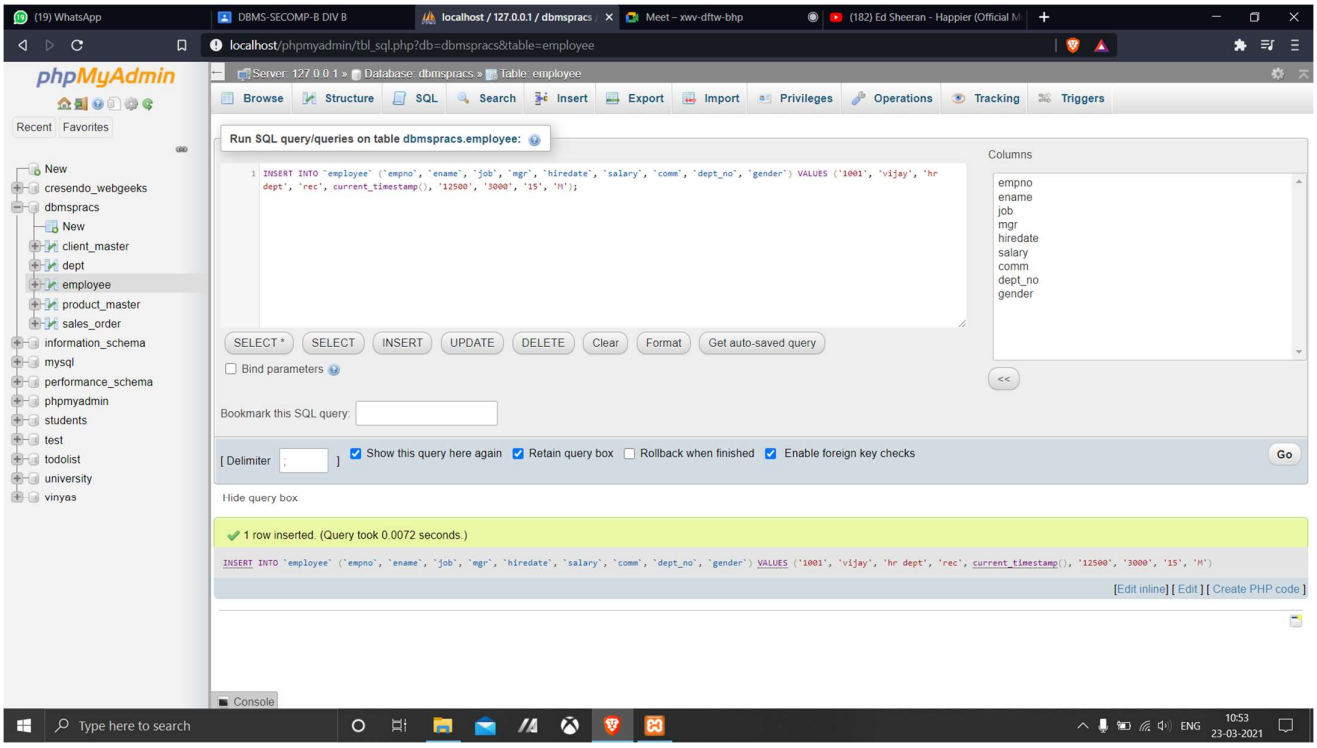
1. To Create Table Dept:

```
CREATE TABLE dept (
 deptno decimal(2) PRIMARY KEY,
 Dname varchar(10) UNIQUE NOT null,
 locaton varchar(10) UNIQUE NOT null
);
```



2. To Create Table Employee:

```
CREATE TABLE employee
(
        empno char(4) PRIMARY KEY,
    ename varchar(10) NOT null,
    job varchar(10),
    mgr char(4),
    hiredate timestamp,
    salary decimal(8,2) DEFAULT 0,
    comm decimal(8,2) DEFAULT 0,
    dept_no decimal(2) REFERENCES dept(deptno),
    gender char CHECK(gender='M' OR gender='F')
);
```



3. Insert Values into the Tables:

INSERT INTO `dept` (`deptno`, `Dname`, `locaton`) VALUES ('15', 'hr dept', 'Mumbai');

INSERT INTO `dept` (`deptno`, `Dname`, `locaton`) VALUES ('14', 'IT dept', 'Pune');

INSERT INTO `dept` (`deptno`, `Dname`, `locaton`) VALUES ('13', 'CS dept', 'Benguluru');

INSERT INTO `dept` (`deptno`, `Dname`, `locaton`) VALUES ('16', 'Mech dept', 'London'):

INSERT INTO `dept` (`deptno`, `Dname`, `locaton`) VALUES ('10', 'Cor dept', 'NewYork'):

INSERT INTO `employee` (`empno`, `ename`, `job`, `mgr`, `hiredate`, `salary`, `comm`, `dept_no`, `gender`) VALUES ('1002', 'bhaskar', 'cs dept', 'sell', current_timestamp(), '25000', '6000', '13', 'M');

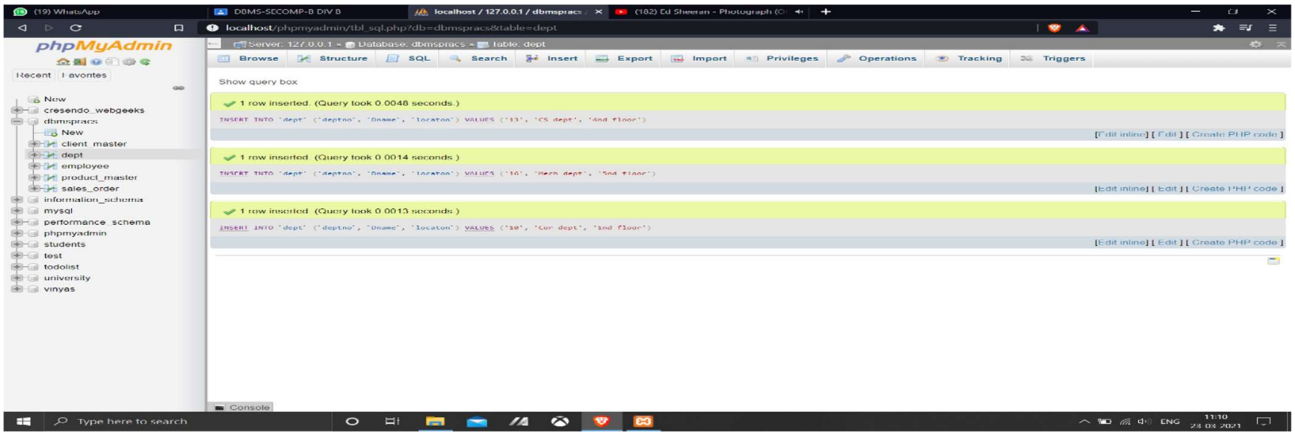
INSERT INTO `employee` (`empno`, `ename`, `job`, `mgr`, `hiredate`, `salary`, `comm`, `dept_no`, `gender`) VALUES ('1003', 'vishali', 'cs dept', 'sell', current_timestamp(), '25000', '6000', '13', 'F');

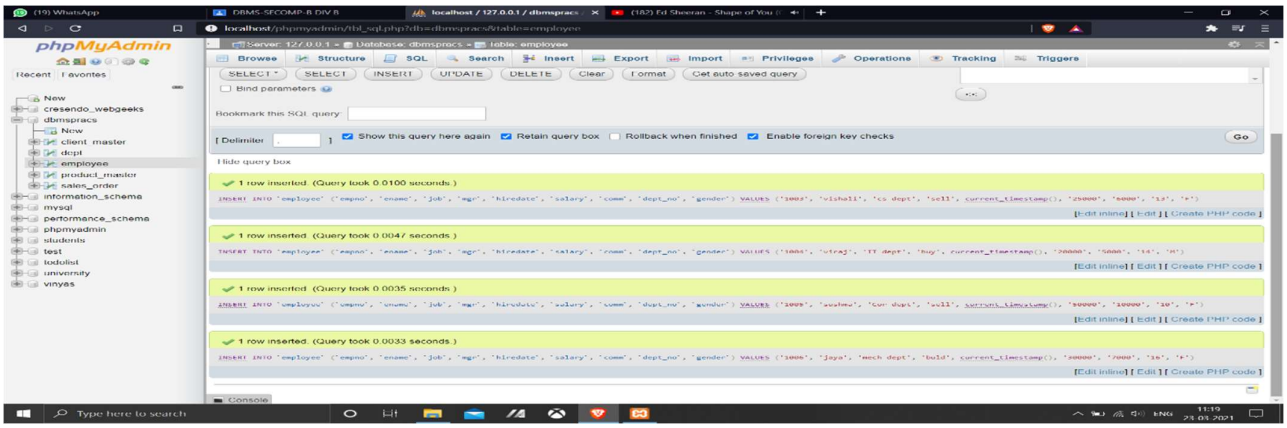
INSERT INTO `employee` (`empno`, `ename`, `job`, `mgr`, `hiredate`, `salary`, `comm`, `dept_no`, `gender`) VALUES ('1004', 'viraj', 'IT dept', 'buy', current_timestamp(), '20000', '5000', '14', 'M');

INSERT INTO `employee` (`empno`, `ename`, `job`, `mgr`, `hiredate`, `salary`, `comm`, `dept_no`, `gender`) VALUES ('1005', 'sushma', 'Cor dept', 'sell', current_timestamp(), '50000', '10000', '10', 'F');

INSERT INTO `employee` (`empno`, `ename`, `job`, `mgr`, `hiredate`, `salary`, `comm`, `dept_no`, `gender`) VALUES ('1006', 'jaya', 'mech dept', 'buld', current_timestamp(), '30000', '7000', '16', 'F');

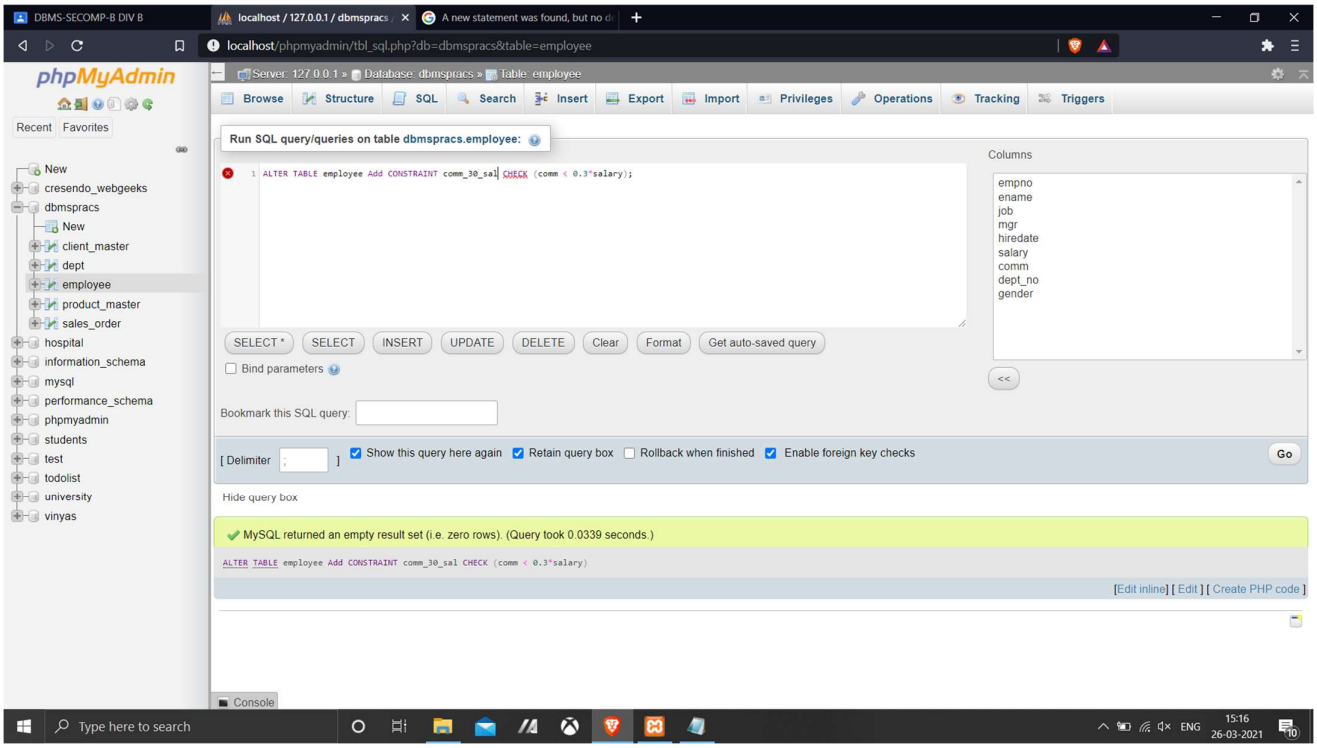
INSERT INTO `employee` (`empno`, `ename`, `job`, `mgr`, `hiredate`, `salary`, `comm`, `dept_no`, `gender`) VALUES ('1001', 'vijay bhaskar', 'hr dept', 'rec', current_timestamp(), '12500', '3000', '15', 'M');





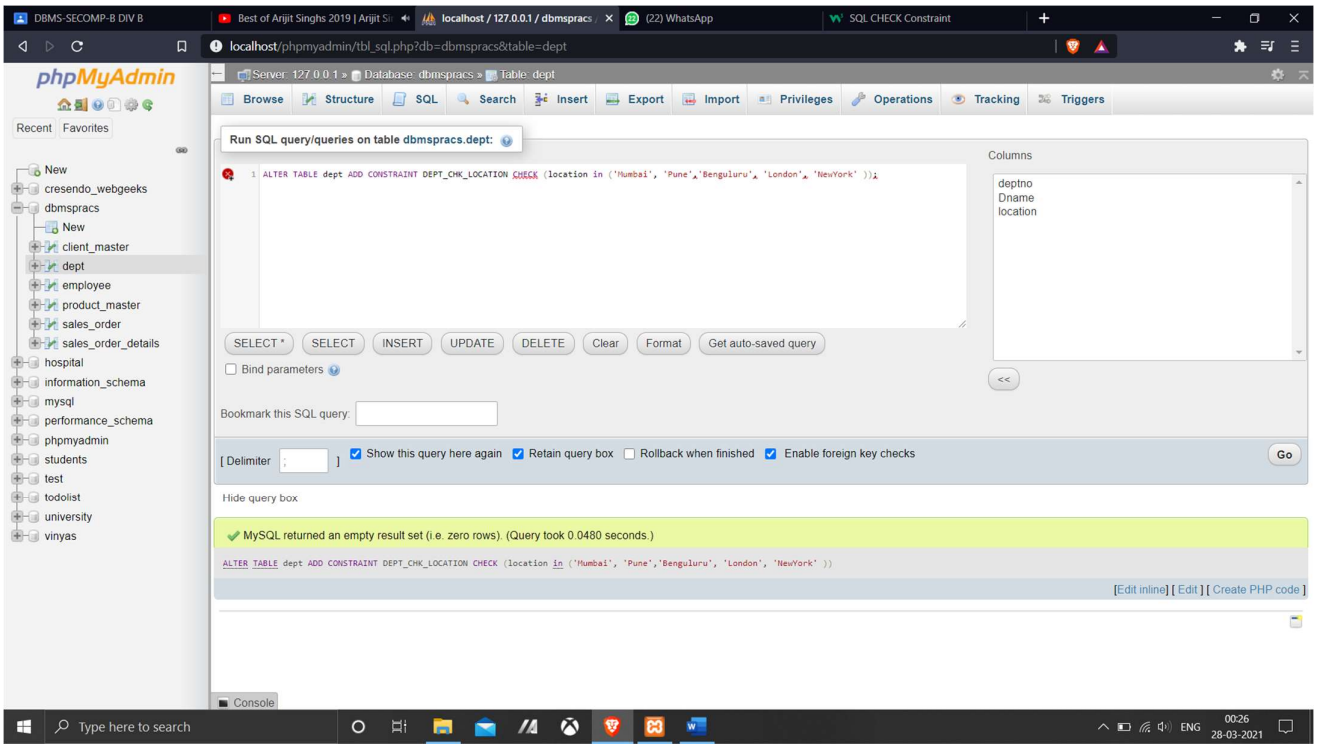
4. Add Constraint to table Employee such that commission cannot be greater than 30% salary:

ALTER TABLE employee Add CONSTRAINT comm_30_sal CHECK (comm < 0.3*salary);



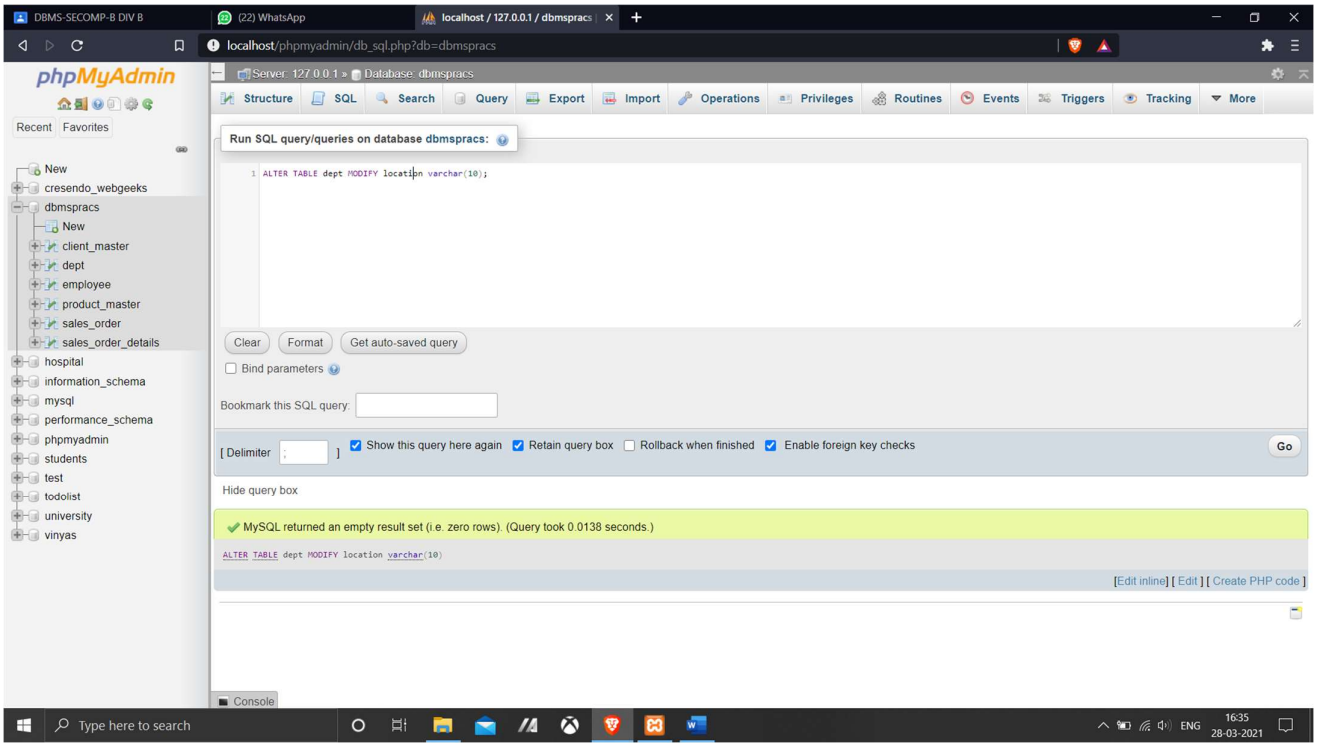
5. Add Constraint to table dept such that location can be only 5 cities:

ALTER TABLE dept ADD CONSTRAINT DEPT_CHK_LOCATION CHECK (location in ('Mumbai', 'Pune','Benguluru', 'London', 'NewYork'));



6. Remove Unique Constraint From location column:

ALTER TABLE dept MODIFY location varchar(10);



Page No.
Date

Postlab Exp5 Pt-2.

(1) What is not NULL constraint. what is Default constraint?

Ans

Not NULL Constraint:-

By default, the columns are able to hold NULL values. A Not NULL constraint in SQL is used to prevent inserting NULL values into the specified column. Constraint it as a not accepted value for that column. This means that the user should provide a valid SQL, Not NULL value to that column in the Insert or Update statements, as the column will always contain data.

The Default Constraint:-

A Default constraint is used to provide a default column value for the inserted row if no value is specified for that column in the Insert statement. The Default constraint helps in maintaining domain integrity by providing proper values for the column, in case the does not provide a value for it. The default value can be a constant value, a system function value or a NULL.

Page No.
Date

Q2 What is Primary Key? What is Primary Key constraint?

Ans The Primary key constraint consists of one column with values that uniquely identify each row in the table.

The SQL Primary Key constraint combines the UNIQUE and SQL NOT NULL constraints, where the column or set of columns that are participating as a primary key cannot accept a NULL VALUE. If the Primary key is defined in multiple columns, you can insert duplicate values on each column individually, but the combination values of all Primary key columns must be unique. Taking into consideration that you can define only one Primary key for each table.

(3) What is Foreign key? What is Foreign key constraint?

Ans

A Foreign key is a database key that is used to link two tables together. The FOREIGN KEY constraint identifies the relationship between the database tables by referring a column or a set of columns, in the CHILD table that contains the foreign key, to the PRIMARY KEY column or set of columns in the Parent table.

The relationship between the child and parent tables is maintained by checking the existence of the child table Foreign key values in the referred primary key before inserting these values into the child table. In this way the Foreign key constraint, in the child table that references the primary key in the parent table, will enforce database referential integrity. Referencing integrity ensures that the relationship between the database is preserved during data insertion process.