SET 1

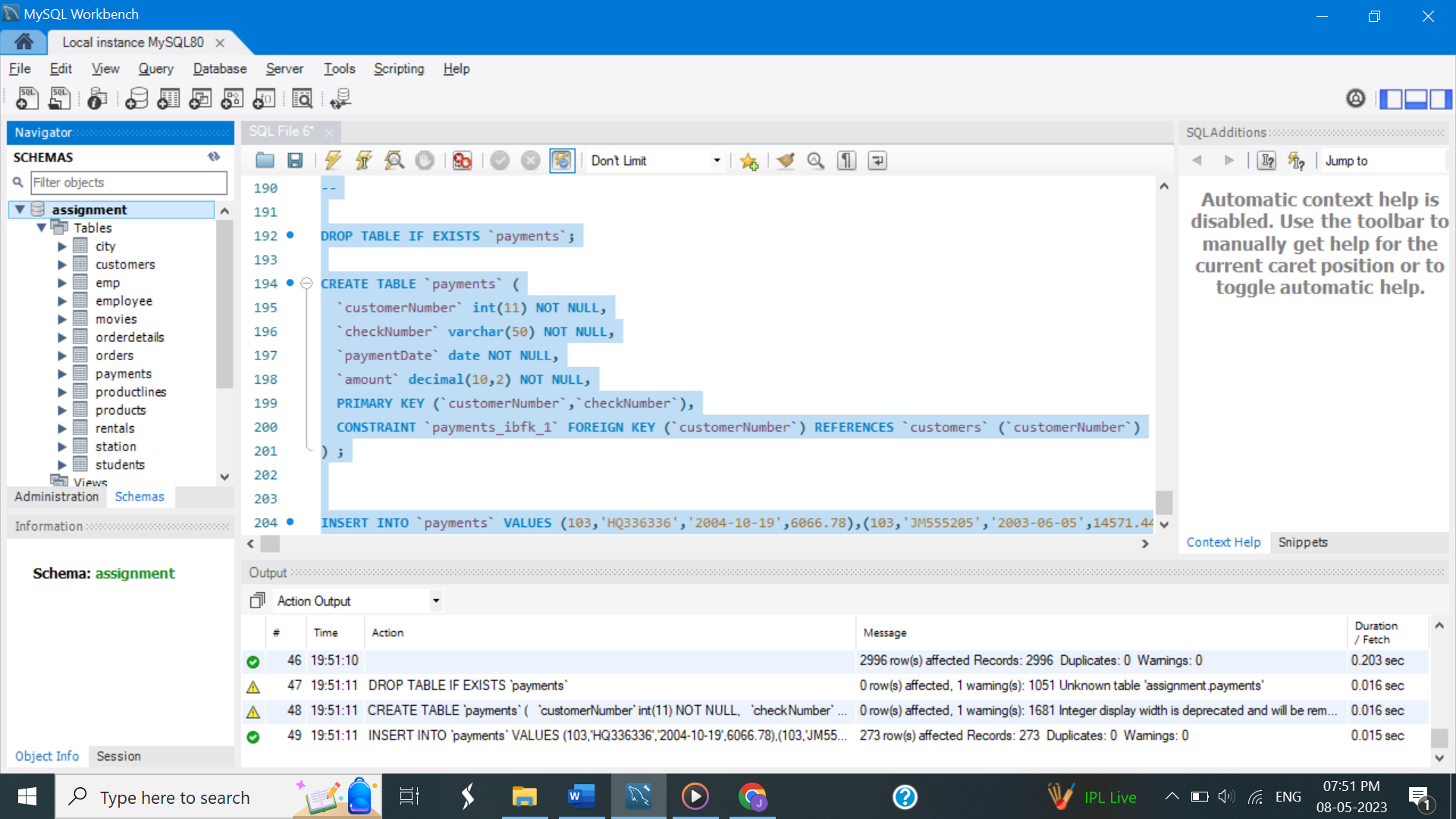
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1. create a database called **'assignment'** (Note please do the assignment tasks in this database)

Ans: CREATE DATABASE assignment;

2. Create the tables from ConsolidatedTables.sql and enter the records as specified in it.

Ans: USE assignment;



3. Create a table called **countries** with the following columns

***name, population, capital***

- choose appropriate datatypes for the columns

Ans:

CREATE TABLE countries (

name varchar(25) unique,

population int,

capital varchar(25)

);

a) Insert the following data into the table

China 1382 Beijing

India 1326 Delhi

United States 324 Washington D.C.

Indonesia 260 Jakarta

Brazil 209 Brasilia

Pakistan 193 Islamabad

Nigeria 187 Abuja

Bangladesh 163 Dhaka

Russia 143 Moscow

Mexico 128 Mexico City

Japan 126 Tokyo

Philippines 102 Manila

Ethiopia 101 Addis Ababa

Vietnam 94 Hanoi

Egypt 93 Cairo

Germany 81 Berlin

Iran 80 Tehran

Turkey 79 Ankara

Congo 79 Kinshasa

France 64 Paris

United Kingdom 65 London

Italy 60 Rome

South Africa 55 Pretoria

Myanmar 54 Naypyidaw

Ans:

INSERT INTO countries ( name, population, capital )

Values ( 'China',1382, 'Beijing' ),

('India', 1326, 'Delhi' ),

( 'United States',324, 'Washington D.C.' ),

( 'Indonesia',260, 'Jakarta' ),

( 'Brazil',209, 'Brasilia' ),

( 'Pakistan', 193,'Islamabad' ),

('Nigeria',187,'Abuja' ),

('Bangladesh',163, 'Dhaka' ),

( 'Russia', 143, 'Moscow' ),

('Mexico', 128,'Mexico City' ),

('Japan',126, 'Tokyo' ),

( 'Philippines',102,'Manila' ),

('Ethiopia', 101, 'Addis Ababa' ),

( 'Vietnam', 94, 'Hanoi' ),

('Egypt', 93,'Cairo' ),

('Germany',81, 'Berlin' ),

( 'Iran', 80, 'Tehran' ),

('Turkey', 79, 'Ankara' ),

( 'Congo',79, 'Kinshasa' ),

('France', 64, 'Paris' ),

( 'United Kingdom',65, 'London' ),

( 'Italy', 60,'Rome' ),

('South Africa',55,'Pretoria'),

('Myanmar', 54,'Naypyidaw' );

b) Add a couple of countries of your choice

Ans:

INSERT INTO countries ( name, population, capital )

Values ('Colombia', 50,'Bogota'),

('South Korea', 58, 'Seoul' ),

('Uganda', 45, 'Kampala'),

('Spain', 46,'Madrid');

c) Change ‘Delhi' to ‘New Delhi'

Ans: Update countries

set capital = 'New Delhi'

where name regexp 'India';

4. Rename the table countries to big\_countries .

RENAME TABLE countries TO big\_countries;

5. Create the following tables. Use auto increment wherever applicable

a. Product

product\_id - primary key

product\_name - cannot be null and only unique values are allowed

description

supplier\_id - foreign key of supplier table

Ans: create table product(

product\_id int primary key auto\_increment,

product\_name varchar(30) unique not null,

description varchar(500),

supplier\_id int,

foreign key(supplier\_id)

references Suppliers (supplier\_id));

b. Suppliers

supplier\_id - primary key

supplier\_name

location

Ans: create table suppliers

(

supplier\_id int primary key auto\_increment,

supplier\_name varchar(25),

location varchar(30)

);

c. Stock

id - primary key

product\_id - foreign key of product table

balance\_stock

Ans: create table stock

(id int primary key auto\_increment,

product\_id int,

balance\_stock int,

foreign key(product\_id)

references product(product\_id)

on delete set null);

6. Enter some records into the three tables.

Ans:

INSERT INTO product (product\_name, description, supplier\_id )

VALUES ('Laptop', 'A laptop computer, sometimes called a notebook computer by manufacturers, is a battery- or AC-powered personal computer', Null ),

('Mobile', 'A mobile phone, portable device for connecting to a telecommunications network in order to transmit and receive voice, etc.', Null),

('Watch', 'A watch is a portable timepiece intended to be carried or worn by a person.',Null ),

('Headphone','A Headphones are a pair of padded speakers which you wear over your ears in order to listen to a recorded music.', Null );

INSERT INTO suppliers ( supplier\_name, location )

Values ('HP', 'United States'),

('Oneplus', 'China'),

('MI', 'China'),

('RealMe', 'China' );

Insert into stock (product\_id, balance\_stock )

Values (100, 205),

(101, 156),

(102, 567),

(103, 45);

7. Modify the supplier table to make supplier name unique and not null.

Ans: Alter table suppliers

modify supplier\_name varchar(25) unique not null;

8. Modify the emp table as follows

1. Add a column called deptno

Ans: alter table emp

add column dept\_no int

after hire\_date;

b. Set the value of deptno in the following order

deptno = 20 where emp\_id is divisible by 2

deptno = 30 where emp\_id is divisible by 3

deptno = 40 where emp\_id is divisible by 4

deptno = 50 where emp\_id is divisible by 5

deptno = 10 for the remaining records.

Ans:

UPDATE emp

SET dept\_no =

case

when emp\_id % 2 = 0 THEN 20

when emp\_id % 3 = 0 THEN 30

when emp\_id % 4 = 0 THEN 40

when emp\_id % 5 = 0 THEN 50

ELSE 10

END;

9. Create a unique index on the emp\_id column.

Ans: CREATE UNIQUE INDEX EMP\_ID\_UNIQ

ON emp ( emp\_id );

10. Create a view called ***emp\_sal*** on the **emp** table by selecting the following fields in the order of highest salary to the lowest salary.

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

Ans: CREATE VIEW emp\_sal as

select emp\_id as emp\_no,

CONCAT( first\_name, ' ', last\_name) as Employee,

salary

from emp

order by salary desc;