**1. Create a table with Columns - ID, First\_Name, Last\_Name, Phone\_Number. Assign following constraints without naming them in a single SQL Syntax:**

create database assignment1;

use assignment1;

create table one(

ID int primary key,

First\_Name varchar(255) check (First\_Name like 'A%'),

Last\_Name varchar(5) check (length(Last\_Name)=5),

Phone\_Number varchar(10) unique

);

-- \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**2. Create a table with Columns - ID, First\_Name, Last\_Name, Phone\_Number. Assign following constraints along with naming them in a single SQL Syntax:**

create table two (

ID int primary key,

First\_Name varchar(255) constraint CHK\_FirstName check (First\_Name like 'A%'),

Last\_Name varchar(5) constraint CHK\_LastName check (length(Last\_Name)=5),

Phone\_Number varchar(10) unique,

constraint PK\_ID unique(ID),

constraint UK\_PhoneNumber unique(Phone\_Number)

);

drop database assignment1;

-- \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**3. Create 2 tables Customers and Orders.**

create database assignment1;

use assignment1;

create table Customers(

ID int primary key,

Name varbinary(255),

Phone\_Num varchar(10),

Address varchar(255)

);

create table Orders(

ID int primary key,

Customer\_ID int,

Total\_Order\_Amount decimal(10, 2),

constraint fk\_customer foreign key (Customer\_ID) references Customers(ID)

);

drop database assignment1;

-- \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**4. Import Customers table from here: https://drive.google.com/file/d/1W3ueqDoTbpkjd63jPDywyBlwhkM2Csgc/view?usp=sharing**

create database assignment1;

use assignment1;

select \* from customers;

alter table customers

add constraint Pk\_Info primary key (FirstName, LastName, City);

drop database assignment1;

-- \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**5. Create following table:**

create database assignment1;

use assignment1;

create table Users (

ID int,

Name varchar(255),

Phone varchar(20),

Address varchar(255),

City varchar(100),

State varchar(100),

Country varchar(100),

Email varchar(255),

constraint PK\_User primary key (Name, City, State)

);

select \* from Users;

drop database assignment1;

-- \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**6. Add Constraints to Existing Table:** *Given an existing table 'Employees' with columns - Emp\_ID, Emp\_Name, Department, Salary, Email. hint - If no table given you need to first create it then solve question*

create database assignment1;

use assignment1;

create table Employees(

Emp\_ID int,

Emp\_Name varchar(255),

Department varchar(100),

Salary decimal,

Email varchar(255),

constraint CHK\_Salary check (Salary > 3000),

constraint UK\_Email unique (Email)

);

select \* from Employees;

drop database assignment1;

-- \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**7. Create Table with Multiple Check Constraints:** *Create a table 'Library\_Books' with columns - Book\_ID, Title, Genre, Publication\_Year, Price.*

create database assignment1;

use assignment1;

create table Library\_Books (

Book\_ID int primary key,

Title varchar(255),

Genre varchar(100) check (Genre in ('Fiction', 'Non-Fiction', 'Science', 'History')),

Publication\_Year int check (Publication\_Year>1900),

Price decimal check (Price>0)

);

select \* from Library\_Books;

drop database assignment1;