☑ ~~ASSIGNMENT NO 8~~

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1. Write MySQL command to create the Table 'LIBRARY' with given constraints.

```
CREATE TABLE LIBRARY (
    BookId INT(10) PRIMARY KEY,
    BookName VARCHAR(40) NOT NULL,
    Type CHAR(4),
    Author VARCHAR(40),
    No_Copies INT(6),
    Price DECIMAL(8,2)
);
```

2. Create following tables and add constraints give valid names to constraints
   Table name: Course
   Column name   constraint
   Course_id   primary key
   course_name   not null

   Table name :Students
   student_id primary key
   student_name not null
   email check
   ph_no   unique
   c_id   foreign key

```
CREATE TABLE Course (
    Course_id INT PRIMARY KEY CONSTRAINT pk_course_id,
    course_name VARCHAR(100) NOT NULL CONSTRAINT nn_course_name
);

-- Creating the Students table
CREATE TABLE Students (
    student_id INT PRIMARY KEY CONSTRAINT pk_student_id,
    student_name VARCHAR(100) NOT NULL CONSTRAINT nn_student_name,
    email VARCHAR(100) CHECK (email LIKE '%@%.%') CONSTRAINT chk_email,
    ph_no VARCHAR(15) UNIQUE CONSTRAINT uq_ph_no,
    c_id INT,
    FOREIGN KEY (c_id) REFERENCES Course(Course_id) CONSTRAINT fk_c_id
);
```

3. Create employee_data and department_data tables .
Department_data
d_id int,
department_name varchar(20)

Employee_data
e_id int,
ename varchar(20),
ph_no int,
email varchar(20),
d_id int.

Add all constraints to the above table using the alter command.

```sql
-- Creating the Department_data table

CREATE TABLE department_data (
    d_id INT PRIMARY KEY CONSTRAINT pk_d_id,
    department_name VARCHAR(20) CONSTRAINT nn_department_name NOT NULL
);

-- Creating the Employee_data table

CREATE TABLE employee_data (
    e_id INT PRIMARY KEY CONSTRAINT pk_e_id,
    ename VARCHAR(20) CONSTRAINT nn_ename NOT NULL,
    ph_no INT CONSTRAINT uq_ph_no UNIQUE,
    email VARCHAR(20) CONSTRAINT chk_email CHECK (email LIKE '%@%.%'),
    d_id INT,
    FOREIGN KEY (d_id) REFERENCES department_data(d_id) CONSTRAINT fk_d_id
);
```

4. Drop all constraints applied on employee_data and department_data table.

```sql
-- Drop the primary key constraint from department_data
ALTER TABLE department_data DROP CONSTRAINT pk_d_id;

-- Drop the NOT NULL constraint from department_name
ALTER TABLE department_data DROP CONSTRAINT nn_department_name;

-- Drop the primary key constraint from employee_data
ALTER TABLE employee_data DROP CONSTRAINT pk_e_id;

-- Drop the NOT NULL constraint from ename
ALTER TABLE employee_data DROP CONSTRAINT nn_ename;

-- Drop the unique constraint on ph_no
ALTER TABLE employee_data DROP CONSTRAINT uq_ph_no;

-- Drop the CHECK constraint on email
ALTER TABLE employee_data DROP CONSTRAINT chk_email;

-- Drop the foreign key constraint from d_id
ALTER TABLE employee_data DROP CONSTRAINT fk_d_id;
```