**Exercise 1: Create a Table with Primary Key Constraint**

**Create a table named "Students" with the following columns:**

student\_id (Primary Key)

first\_name

last\_name

age (Must be greater than or equal to 18)

**Exercise 2: Add Foreign Key Constraint**

**Create a table named "Courses" with the following columns:**

course\_id (Primary Key)

course\_name

student\_id (Foreign Key referencing student\_id from the Students table)

**Exercise 3: Add Unique Constraint**

**Alter the Students table to ensure that the combination of first\_name and last\_name is unique.**

**Exercise 4: Add Check Constraint**

**Alter the Courses table to ensure that the course\_duration is between 1 and 12.**

**Exercise 5: Remove a Constraint**

**Remove the unique\_name\_combination constraint from the Students table.**

**Exercise 6: Disable and Enable Constraints**

**Temporarily disable the foreign key constraint on the Courses table, perform an update, and then enable the constraint again.**

Exercise 7: **Create a Table with Composite Primary Key and Foreign Key Constraint**

**Create two tables: "Orders" and "OrderItems."**

**The "Orders" table should have the following columns:**

order\_id (Primary Key)

customer\_id

order\_date

**The "OrderItems" table should have the following columns:**

order\_id (Foreign Key referencing order\_id from Orders table)

product\_id

quantity

**Exercise 8: Create a Table with Multiple Constraints**

**Create a table named "Employees" with the following columns:**

employee\_id (Primary Key)

first\_name

last\_name

birth\_date

hire\_date

salary (Must be a positive value)

department\_id (Foreign Key referencing department\_id from Departments table)

supervisor\_id (Foreign Key referencing employee\_id from Employees table)

CHECK constraint to ensure that birth\_date is before hire\_date

**Exercise** 9: **Creating a Table with Unique Constraint and Inserting Data**

**Scenario: You want to create a "Books" table with columns: book\_id, title, author, and ISBN. You want to ensure that ISBN values are unique.**

**Exercise 10: Creating customers table with the following columns**

customer\_id INT PRIMARY KEY,

first\_name VARCHAR(50),

last\_name VARCHAR(50),

email VARCHAR(100) UNIQUE,

phone\_number VARCHAR(20),

birth\_date DATE,

registration\_date DATE

**Try to add check constraints to check birth\_date and registration\_date <= current date.**

**Exercise 11: Creating a Table with Foreign Key Constraint and Inserting Data**

**Scenario: You want to create a "Orders" table with columns: order\_id, customer\_id, order\_date, and total\_amount. You also want to create a foreign key constraint referencing the "Customers" table.**

**Exercise 12: Creating a Table with Check Constraint and Inserting Data**

**Scenario: You want to create a "Employees" table with columns: employee\_id, first\_name, last\_name, birth\_date, and hire\_date. You want to add a check constraint to ensure that the birth date is before the hire date.**