Tutorial 6

Exercise 1:

Write the SQL statement to create a new database named `ZooDB`.

Exercise 2:

Within the `ZooDB` database, create a table named `Zookeeper` to store staff information. The table must meet the following requirements:

1. A primary key column `KeeperID` of type integer that automatically starts at 101 and increments by 1.
2. A column `LastName` that cannot contain null values and has a maximum length of 50 characters.
3. A column `HireDate` of type date that cannot contain null values.

Exercise 3:

Create a table named `Animal` to store animal records. The table must include:

1. A primary key column `AnimalID` (integer).
2. A column `Species` (maximum 100 characters) that cannot be null.
3. A column `DateOfBirth` (date).
4. A column `KeeperID` (integer) that links to the `Zookeeper` table's `KeeperID` (Foreign Key).
5. A column `WeightKG` (numeric with 5 total digits and 2 decimal places) that must be greater than 0. Give this constraint the name `CK_Animal_PositiveWeight`.
6. A column `EntryDate` (date) that automatically records the current date if no value is provided.

Exercise 4:

Add a constraint to the `Animal` table that ensures the combination of `Species` and `AnimalName` is unique. This is to prevent entering two animals of the same species with the exact same name (e.g., two "Lion" named "Simba"). Name the constraint `UQ_Animal_SpeciesName`.

Exercise 5:

The Zookeeper's `FirstName` column currently allows NULLs (see Exercise 2). Modify the `Zookeeper` table to make the `FirstName` column **NOT NULL**.

Exercise 6:

Change the data type of the `LastName` column in the `Zookeeper` table from `VARCHAR(50)` to `VARCHAR(100)` to allow for longer last names.

Exercise 7:

The zoo has decided that tracking the exact `DateOfBirth` for all animals is impractical. Write the SQL statement to permanently remove the `DateOfBirth` column from the `Animal` table.

Exercise 8:

The zoo wants to disable the rule that forces the `WeightKG` to be greater than 0. Drop the check constraint `CK_Animal_PositiveWeight` from the `Animal` table.

Exercise 9:

Write the sequence of SQL statements to:

- Delete the `Animal` table.