Week 1 Review - National Park Campsite

You've been hired by the National Park Service as its newest developer. For your first assignment, your manager tasked you with writing queries against the National Park Campsite Reservation database. Before you write queries, you'll need to review the database's schema and data.

Step One: Getting started

1. Create a new database called `campground`.
2. Open the `database/campground.sql` file in DB Visualizer.
3. In the "Database Connection" properties above the file, select the campground database.
4. Run all of the database commands in the file at once by pressing the "run" button on the tool bar.

Step Two: Review database schema and data

Before writing any queries, you need to review each table. Focus on understanding the purpose of each table, the primary and foreign keys, constraints, and how the tables relate to each other. Then, look at the sample data that was added to each of the tables.

Parks table

A parks table is provided to the system that provides the data for each of the supported national parks. The data columns are as follows:

	Field	Description
PK	park_id	A surrogate key for the park.
	name	The name of the park.
	location	The location of the park.
	establish_date	The date that the park was established.
	area	The size of the park in square kilometers.
	visitors	The annual number of visitors to the park.
	description	A short description about the park.

Campground table

A campground table is provided to the system that provides a list of the one or many campgrounds located inside of a national park. The data columns are as follows:

	Field	Description
PK	campground_id	A surrogate key for the campground.
FK	park_id	The park that the campground is associated with.

	Field	Description
	name	The name of the campground.
	open_from_mm	The numerical month the campground is open for reservation. (01 - January, 02 - February, ...)
	open_to_mm	The numerical month the campground is closed for reservation. (01 - January, 02 - February, ...)
	daily_fee	The daily fee for booking a campsite at this campground.

Site table

A site table lists all of the campsites available for reservation in a campground. The data columns are as follows:

	Field	Description
PK	site_id	A surrogate key for the campsite.
FK	campground_id	The campground that the park belongs to.
	site_number	The arbitrary campsite number.
	max_occupancy	Maximum occupancy at the campsite.
	accessible	Indicates whether or not the campsite is handicap accessible.
	max_rv_length	The maximum RV length that the campsite can fit. 0 indicates that no RV fits at this campsite.
	utilities	Indicates whether or not the campsite provides access to utility hookup.

Reservation table

The reservation table lists all of the past, current, and future reservations for a campsite in the national park system. The data columns are as follows:

	Field	Description
PK	reservation_id	A surrogate key for the reservation.
FK	site_id	The campsite the reservation is for.
	name	The name for the reservation.
	from_date	The start date of the reservation.
	to_date	The end date of the reservation.
	create_date	The date the reservation was booked.

Step Three: Read data from a database

In DB Visualizer, open `step-3.sql`. Each SQL statement you need to write starts with a comment describing the requirements. In this step, you'll write 16 queries.

> Note: If you need to select all columns from a table, avoid using `select *` in favor of column names.

Step Four: Query from multiple tables

In DB Visualizer, open `step-4.sql`. Each SQL statement you need to write starts with a comment describing the requirements. In this step, you'll write six queries.

Step Five: Add, modify, and remove data from a database

In DB Visualizer, open `step-5.sql`. You need to add a new park, campground, sites, and reservations to the National Park Database. Each SQL statement you need to write starts with a comment describing the requirements. In this step, you'll write seven queries.