8. Solutions to exercises

Hopefully the practice exercises were helpful in solidifying your understanding of SQL concepts. If you got stuck on any of them, or would like to check your answers, feel free to refer to our answers below

Problem 1: Write a SQL query to get the names of all parks with fewer than 1,000,000 visitors.

This problem asks for the park names (a single column) with the requirement that there are fewer than 1,000,000 visitors, which can be specified in the `WHERE` clause.

```
SELECT name FROM park
WHERE park_visitors < 1000000
```

Problem 2: Write a SQL query to get the number of distinct cities in the `park` table

The total count of a column can be calculated using the `COUNT()` function, but since you only want distinct cities (since some cities have multiple parks), you can use the `DISTINCT` keyword before the column name in the `COUNT()` function.

```
SELECT COUNT(DISTINCT city) FROM park
```

Problem 3: Write a SQL query to get the total number of visitors to parks in San Francisco.

The total number of visitors can be calculated using the `SUM()` function. Additionally, you also need a `WHERE` clause to specify only parks located in San Francisco.

```
SELECT SUM(park_visitors) FROM park
WHERE city = "San Francisco"
```

Problem 4: Write a SQL query to the top 5 parks (names only) along with their visitor count that had the most visitors, in descending order.

The query needs to get both the name and park_visitors columns. The results are sorted on the `park_visitors` column in descending order using the `ORDER BY` clause. Because you don't want to group the results on another column *and sort within those groups*, a `GROUP BY` clause is not necessary.

```
SELECT name, park_visitors FROM park
ORDER BY park_visitors DESC
LIMIT 5
```