WeatherApp SQL Script

Create a Database:

```
CREATE DATABASE WeatherApp;
```

Use the Created Database:

```
USE WeatherApp;
```

Create Table for Weather Data:

```
CREATE TABLE Weather (
  id INT PRIMARY KEY AUTO_INCREMENT,
  city_name VARCHAR(100),
  temperature DECIMAL(5, 2),
  humidity INT,
  wind_speed DECIMAL(5, 2),
  timestamp TIMESTAMP DEFAULT CURRENT_TIMESTAMP
);
```

Insert Sample Data into the Weather Table:

```
INSERT INTO Weather (city_name, temperature, humidity, wind_speed)
VALUES
  ('New York', 22.5, 60, 10.2),
  ('Los Angeles', 25.3, 40, 8.7),
  ('Chicago', 18.9, 55, 12.4);
```

Retrieve All Weather Data:

```
SELECT * FROM Weather;
```

Retrieve Weather for a Specific City (e.g., New York):

```
SELECT city_name, temperature, humidity, wind_speed
FROM Weather
WHERE city_name = 'New York';
```

Update Temperature for a Specific City (e.g., Los Angeles):

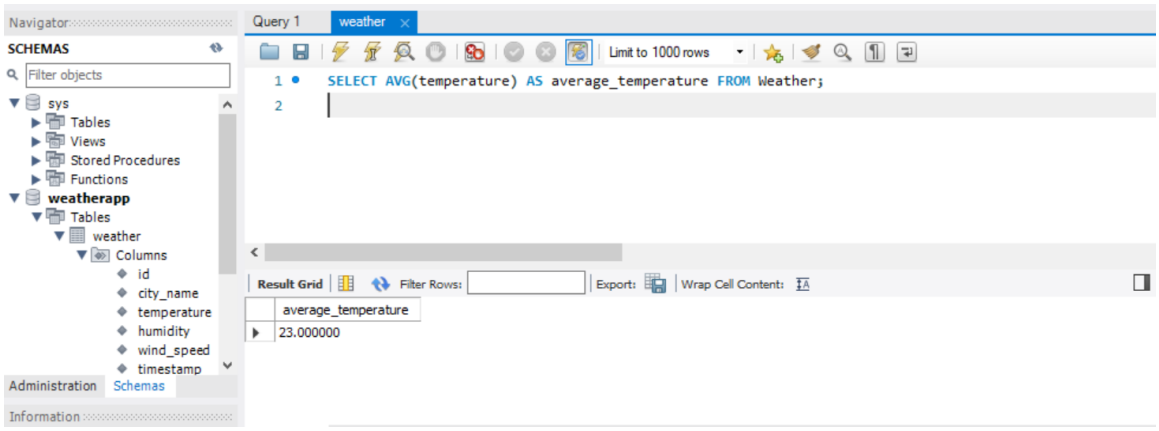
```
UPDATE Weather
SET temperature = 23.5
WHERE city_name = 'Los Angeles';
```

Delete Weather Data for a Specific City (e.g., Chicago):

```
DELETE FROM Weather
WHERE city_name = 'Chicago';
```

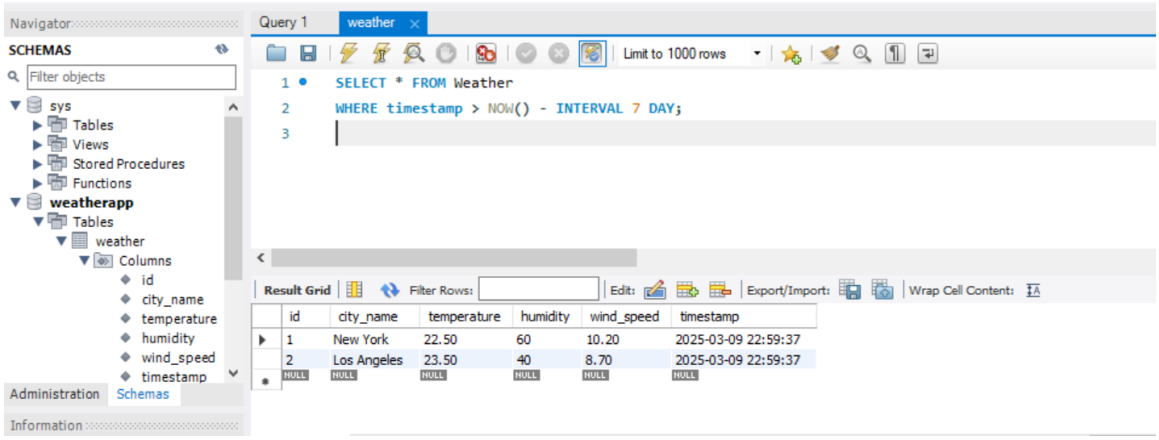
Get Average Temperature of All Cities:

SELECT AVG(temperature) AS average_temperature FROM Weather;



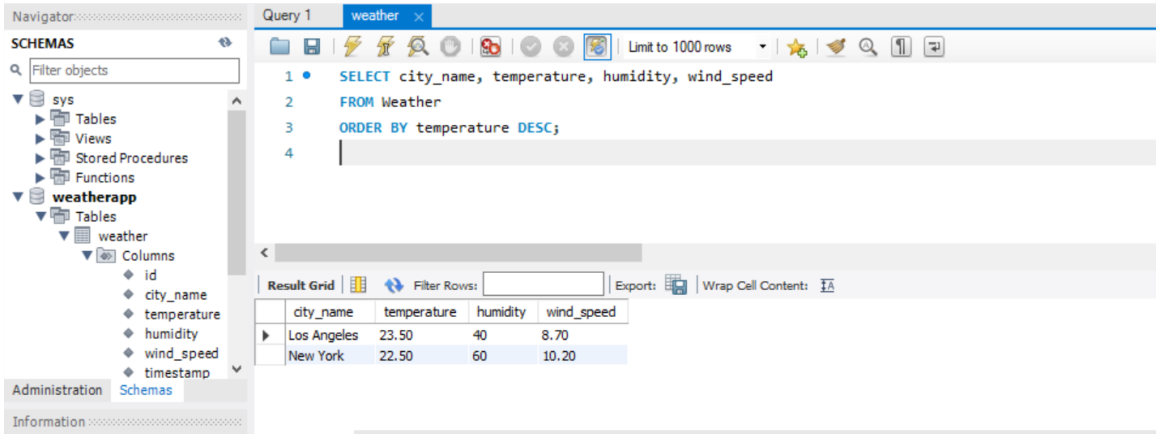
Get Weather Data for the Last 7 Days (if timestamp exists):

SELECT * FROM Weather
WHERE timestamp > NOW() - INTERVAL 7 DAY;



Sort Weather Data by Temperature (Descending):

```
SELECT city_name, temperature, humidity, wind_speed
FROM Weather
ORDER BY temperature DESC;
```



Create an Additional Table for City Information:

```
CREATE TABLE CityInfo (
  city_id INT PRIMARY KEY AUTO_INCREMENT,
  city_name VARCHAR(100),
  population INT,
  country VARCHAR(100)
);
```

Insert Sample City Information Data:

```
INSERT INTO CityInfo (city_name, population, country)
VALUES
  ('New York', 8419600, 'USA'),
  ('Los Angeles', 3980400, 'USA'),
  ('Chicago', 2716000, 'USA');
```

Join Weather Data with City Information:

```
SELECT w.city_name, w.temperature, w.humidity, w.wind_speed, c.population, c.country
FROM Weather w
JOIN CityInfo c ON w.city_name = c.city_name;
```