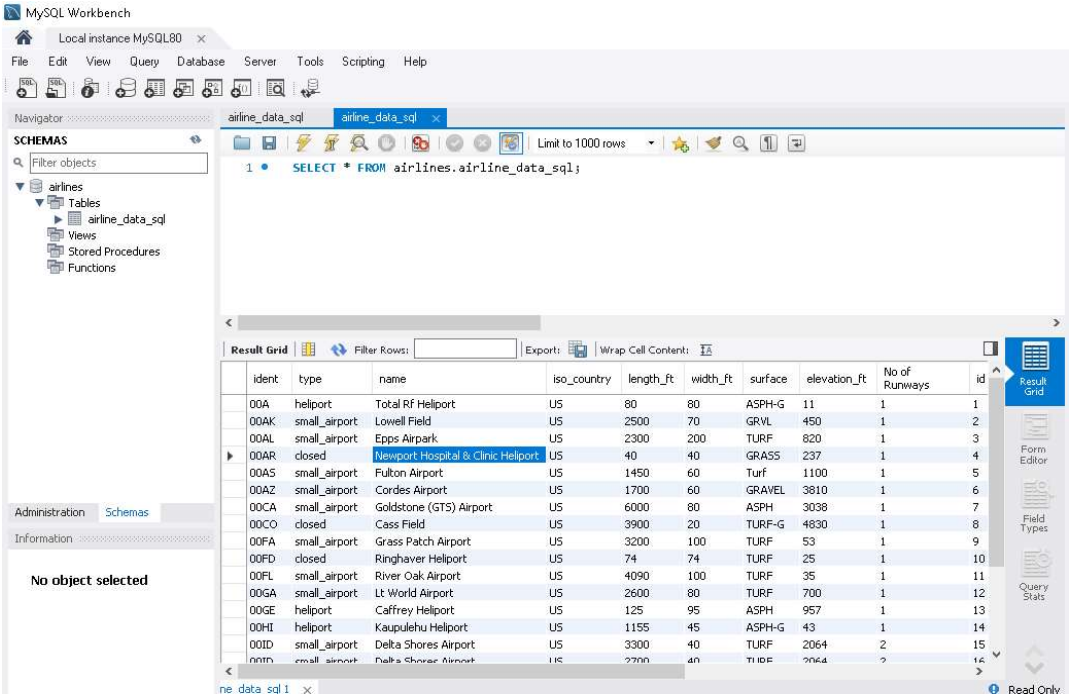
SQL

Loaded the dataset into the mysql server.



1. Determine the number of flights that are delayed on various days of the week

```
SELECT DayOfWeek, COUNT(*) AS DelayedFlights
FROM airlines.airline_data_sql
WHERE Delay = 1 AND DayOfWeek IN (3, 4, 5)
GROUP BY DayOfWeek;
```

Output:

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

DayOfWeek	DelayedFlights
3	9

2. Determine the number of delayed flights for various airlines

```
SELECT Airline, COUNT(*) AS DelayedFlights
FROM airlines.airline_data_sql
WHERE Delay = 1
GROUP BY Airline;
```

Output:

Airline	DelayedFlights
CO	3
US	1
AA	3
DL	2

3. Determine how many delayed flights land at airports with at least 10 runways

```
SELECT COUNT(*) AS delayed_flights_count
FROM airlines.airline123
WHERE Delay = 1
  AND `No of Runways` >= 10;
```

	delayed_flights_count
▶	6

4. Compare the number of delayed flights at airports higher than average elevation and those that are lower than average elevation for both source and destination airports

```
SELECT
    subquery.AverageElevation,
    SUM(CASE WHEN Delay = 1 AND elevation_ft > subquery.AverageElevation THEN 1 ELSE 0 END)
    AS DelayedFlightsHighElevation,
    SUM(CASE WHEN Delay = 1 AND elevation_ft < subquery.AverageElevation THEN 1 ELSE 0 END)
    AS DelayedFlightsLowElevation
FROM
    (SELECT AVG(elevation_ft) AS AverageElevation FROM airlines.airline_data_sql) AS subquery,
    airlines.airline_data_sql
GROUP BY
    subquery.AverageElevation;
```

Output:

AverageElevation	DelayedFlightsHighElevation	DelayedFlightsLowElevation
1132.3182	1	8