



# SQL Practice Assignment

January 14, 2025

## Questions

Use the fldb database to answer the following questions.

1. Write a SQL query to retrieve the names of all airlines along with their IATA codes from the `airline` table.

**Answer:**

2. Create a query that returns the total capacity of airplanes for each airline. Include the airline name and the sum of capacities.

**Answer:**

3. Create a query to list all flights departing from the airport with ICAO code 'KAVL' including the flight number, departure time, and destination airport name.

**Answer:**

4. Write a query to find the average salary for employees in each department. Include the department name and the average salary.

**Answer:**

5. Create a SQL query to retrieve the passport numbers and full names (concatenation of first and last names) of all passengers.

**Answer:**

6. Write a query to find the airplane types (identifier from `airplane_type` table) that have not been assigned to any airplanes in the `airplane` table.

**Answer:**

7. Create a query to show the flight details (flight number, departure, and arrival times) for flights that depart from 'CHIPPEWA VALLEY REGL' and arrive at 'IRAN SHAHR'.

**Answer:**

8. Write a SQL query to get the number of bookings made by each passenger. Include the passenger's passport number and the count of bookings.

**Answer:**

9. Create a query to find the average temperature and humidity for each day from the **weatherdata** table.

**Answer:**

10. Write a SQL query to rank airlines based on the number of flights they operate. Display the airline name, the number of flights they operate, and their rank, with the highest number of flights ranked first.

**Answer:**

11. Retrieve all passengers and their booking details using an **INNER JOIN**.

**Answer:**

12. List all flights and their corresponding airplane details using a **LEFT JOIN**.

**Answer:**

13. Show airports that are reachable along with the number of hops using a **RIGHT JOIN**.

**Answer:**

14. Find all airlines along with the airplanes they operate using a **FULL OUTER JOIN**.

**Answer:**

15. List all airports and weather data for their respective locations using a **CROSS JOIN**.

**Answer:**

16. Retrieve flight schedules and the respective departure and arrival airports using a **SELF JOIN**.

**Answer:**

17. Find passengers without any bookings using a **LEFT JOIN** with **NULL** filtering.

**Answer:**

18. List employees and their department along with any flights they logged using an **INNER JOIN**.

**Answer:**

19. Show airlines with airplanes and airplane types using **multi-table JOINS**.

**Answer:**

20. Retrieve flights that connect two airports directly using a **JOIN with conditions**.

**Answer:**