

Assignment 3

This assignment must be completed by hand. Typed submissions will not be accepted. You will need to submit it both on Moodle, GitHub and as a hard copy.

Question 1 :

1) Based on the relational database schema provided (Airline Reservation),

AIRPORT

<u>Airport_code</u>	Name	City	State
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FLIGHT

<u>Flight_number</u>	Airline	Weekdays
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FLIGHT_LEG

<u>Flight_number</u>	<u>Leg_number</u>	Departure_airport_code	Scheduled_departure_time
		Arrival_airport_code	Scheduled_arrival_time

LEG_INSTANCE

<u>Flight_number</u>	<u>Leg_number</u>	<u>Date</u>	Number_of_available_seats	Airplane_id
	<u>Departure_airport_code</u>	<u>Departure_time</u>	<u>Arrival_airport_code</u>	<u>Arrival_time</u>

FARE

<u>Flight_number</u>	<u>Fare_code</u>	Amount	Restrictions
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AIRPLANE_TYPE

<u>Airplane_type_name</u>	Max_seats	Company
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CAN_LAND

<u>Airplane_type_name</u>	<u>Airport_code</u>
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AIRPLANE

<u>Airplane_id</u>	Total_number_of_seats	Airplane_type
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SEAT_RESERVATION

<u>Flight_number</u>	<u>Leg_number</u>	<u>Date</u>	<u>Seat_number</u>	Customer_name	Customer_phone
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a) Display a list of all flights, it should be sorted alphabetically.

- b) For the fares with amount over 50\$, display the Restrictions, and amount after taxes . Note: Taxes = 15%.
- c) Delete 5% from the records in SEAT_Reservation table.
- d) For each AIRPLANE_TYPE, display a list of Airline_type_name and the number of seats the airplane has.
- e) Retrieve the name of airplane type whose name starts with E and ends with T.
- f) Write a SQL query to list all flights along with their departure and arrival airport names, departure and arrival times, and the airplane type used for each flight leg. Ensure that only flights scheduled on a specific weekday (Monday) are included in the results.
- j) Write a SQL query to find all flights operated by airlines whose name contains the word "Air". The query should return the flight number, airline name, departure airport name, arrival airport name, and scheduled departure and arrival times for each leg of the flight.

Bonus Question:

Insert records into the specified table in your database.

1. Take a Screenshot: After inserting the data, take a screenshot showing the inserted records in the table.
2. Run a Query: Write and execute a SQL query to retrieve all records from the table. Take a screenshot of the results displayed.
3. Submit: Include both screenshots (inserted data and query results) in your assignment submission.

→ Do not use ChatGPT or similar tools to generate responses, as doing so may result in a zero.