Lian Guoxi Air Cargo Analysis Project

1 Create an ER diagram for the given airlines database.

Diagram

Description automatically generated

2 Write a query to create route\_details table using suitable data types for the fields, such as route\_id, flight\_num, origin\_airport, destination\_airport, aircraft\_id, and distance\_miles. Implement the check constraint for the flight number and unique constraint for the route\_id fields. Also, make sure that the distance miles field is greater than 0.

Graphical user interface, text, application

Description automatically generated

Table

Description automatically generated

3 Write a query to display all the passengers (customers) who have traveled in routes 01 to 25. Take data from the passengers\_on\_flights table.

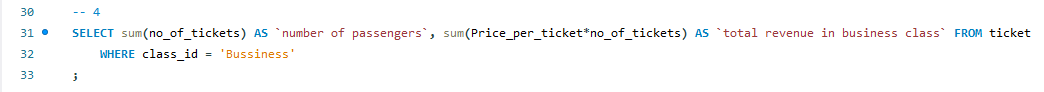
Graphical user interface, text, application, chat or text message

Description automatically generated

A screenshot of a computer

Description automatically generated with medium confidence

4 Write a query to identify the number of passengers and total revenue in business class from the ticket\_details table.



Graphical user interface, text, application

Description automatically generated

5 Write a query to display the full name of the customer by extracting the first name and last name from the customer table.

A picture containing chart

Description automatically generated

Graphical user interface, application, table

Description automatically generated

6 Write a query to extract the customers who have registered and booked a ticket. Use data from the customer and ticket\_details tables.

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Description automatically generated

Table

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7 Write a query to identify the customer’s first name and last name based on their customer ID and brand (Emirates) from the ticket\_details table.

Text

Description automatically generated

Table

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8 Write a query to identify the customers who have traveled by Economy Plus class using Group By and Having clause on the passengers\_on\_flights table.

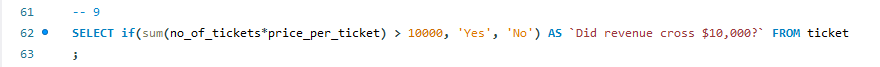
Text

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Graphical user interface, application, table

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9 Write a query to identify whether the revenue has crossed 10000 using the IF clause on the ticket\_details table.



Graphical user interface, text, application

Description automatically generated

10 Write a query to create a view with only business class customers along with the brand of airlines.

Graphical user interface, text, application

Description automatically generated

Text

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Table

Description automatically generated

11 Write a query to create a stored procedure to get the details of all passengers flying between a range of routes defined in run time. Also, return an error message if the table doesn't exist.

Graphical user interface, text, application

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Graphical user interface, table

Description automatically generated

Graphical user interface, text, application, email

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Graphical user interface, text, application

Description automatically generated

12 Write a query to create a stored procedure that extracts all the details from the routes table where the traveled distance is more than 2000 miles.

Graphical user interface, text, application

Description automatically generated

Table

Description automatically generated

13 Write a query to create a stored procedure that groups the distance traveled by each flight into three categories. The categories are, short distance travel (SDT) for >=0 AND <= 2000 miles, intermediate distance travel (IDT) for >2000 AND <=6500, and long-distance travel (LDT) for >6500.

Graphical user interface, text, application

Description automatically generated

Table

Description automatically generated