

TASK TO PERFORM

1. Create an ER diagram for the given airlines database.
2. Write a query to display all the passengers (customers) who have travelled in routes 01 to 25. Take data from the passengers_on_flights table.
3. Write a query to identify the number of passengers and total revenue in business class from the ticket_details table.
4. Write a query to display the full name of the customer by extracting the first name and last name from the customer table.
5. Write a query to extract the customers who have registered and booked a ticket. Use data from the customer and ticket_details tables.
6. 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.
7. Write a query to identify the customers who have travelled by *Economy Plus* class using Group By and Having clause on the passengers_on_flights table.
8. Write a query to identify whether the revenue has crossed 10000 using the IF clause on the ticket_details table.
9. Write a query to create and grant access to a new user to perform operations on a database.
10. Write a query to find the maximum ticket price for each class using window functions on the ticket_details table.
11. Write a query to extract the passengers whose route ID is 4 by improving the speed and performance of the passengers_on_flights table.
12. For the route ID 4, write a query to view the execution plan of the passengers_on_flights table.
13. Write a query to calculate the total price of all tickets booked by a customer across different aircraft IDs using rollup function.

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14. Write a query to create a view with only business class customers along with the brand of airlines.
15. 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.
16. Write a query to create a stored procedure that groups the distance travelled 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 .
17. Write a query to extract ticket purchase date, customer ID, class ID and specify if the complimentary services are provided for the specific class using a stored function in stored procedure on the ticket_details table.
Condition:
If the class is *Business* and *Economy Plus*, then complimentary services are given as *Yes*, else it is *No*
18. Write a query to extract the first record of the customer whose last name ends with Scott using a cursor from the customer table.

Project Outcome

- *This project is designed to analyze the busiest route to increase the number of aircraft required.*
- *It also helps to identify the regular customers to provide offers and prepare an analysis of the ticket sales.*
- *You should be able to ensure the company improves its operability and becomes more customer-centric and appealing to travelers.*