1. Write Query: Rank airlines by total fare collected (highest first).

Expected Output:

airline_name | total_fare | rank IndiGo | 145000.00 | 1 Emirates | 132500.00 | 2

2. Write Query: Find passengers who have booked both Economy and Business class.

Expected Output:

full_name John Doe Fatima Zahra

3. Write Query: List the top 3 most frequently flown passengers.

Expected Output:

full_name | total_flights Emily Clark | 4 David Lee | 3 Rahul Anand | 3

4. Write Query: Get average delay time of delayed flights (difference between actual and scheduled).

Expected Output:

average_delay_minutes 45

5. Write Query: Pivot total fare by seat class for each airline.

Expected Output:

airline_name | Economy | Business | First IndiGo | 40000 | 30000 | 15000 Lufthansa | 28000 | 22000 | 10000

6. Write Query: List passengers who have only flown with one airline.

Expected Output:

full_name | airline_name Carlos Rivera | Lufthansa Takeshi Yamamoto | IndiGo

7. Write Query: Find flights where all bookings are in Business class.

Expected Output:

flight_number | total_bookings EM705 | 3

8. Write Query: List flights that have more than 2 passengers from the same nationality.

Expected Output:

flight_number | nationality | count IN205 | India | 3

9. Write Query: Show each passenger's total fare and average fare per booking.

Expected Output:

full_name | total_fare | average_fare David Lee | 75000 | 25000

10. Write Query: Find passengers who always book First class.

Expected Output:

full_name John Doe Anna Müller

11. Write Query: Get flights with the longest duration.

Expected Output:

flight_number | duration_minutes LH302 | 420

12. Write Query: List passengers who flew on all available seat classes.

Expected Output:

full_name Emily Clark

13. Write Query: Rank flights by total revenue collected.

Expected Output:

flight_number | total_revenue | rank IN205 | 52000 | 1 LH109 | 46000 | 2

14. Write Query: Find average fare per kilometer (hypothetical distance_km column in flights).

Expected Output:

flight_number | fare_per_km IN205 | 5.2 EM601 | 4.6

15. Write Query: Find passengers who booked multiple classes on the same flight.

Expected Output:

full_name | flight_number David Lee | LH109

16. Write Query: Identify which airline has the highest average fare.

Expected Output:

airline_name | avg_fare Singapore Airlines | 15000

17. Write Query: Count of unique destinations per nationality of passengers.

Expected Output:

nationality | unique_destinations India | 4 Germany | 2

18. Write Query: Show top 3 most profitable routes (origin → destination).

Expected Output:

route | total_revenue Delhi → Dubai | 56000 Frankfurt → Tokyo | 48000

19. Write Query: Passengers who have never cancelled a booking.

Expected Output:

full_name Emily Clark Carlos Rivera

20. Write Query: Flights with mixed class types (Economy + Business + First).

Expected Output:

flight_number | distinct_classes LH205 | 3

21. Write Query: Calculate average flight occupancy (based on number of bookings).

Expected Output:

flight_number | occupancy_rate EM601 | 78.5

22. Write Query: Rank destinations based on the number of unique passengers.

Expected Output:

destination | passenger_count | rank Dubai | 7 | 1 London | 5 | 2

23. Write Query: Show flights with same origin and destination multiple times.

Expected Output:

origin | destination | flight_count Delhi | Dubai | 3

24. Write Query: Passengers who booked the same class every time.

Expected Output:

full_name | seat_class Fatima Zahra | Business

25. Write Query: Flights where all bookings are Confirmed or Checked-In.

Expected Output:

flight_number IN309 SG707

26. Write Query: Count of total flights, delayed, and cancelled per airline.

Expected Output:

airline_name | total | delayed | cancelled IndiGo | 4 | 1 | 0 Emirates | 3 | 0 | 1

27. Write Query: Bookings grouped by gender and seat class.

Expected Output:

gender | seat_class | count Male | Economy | 5 Female | First | 2

28. Write Query: Passengers who booked at least one ticket for each destination.

Expected Output:

full_name Emily Clark

29. Write Query: Top 5 nationalities with the highest total booking value.

Expected Output:

nationality | total_fare India | 120000 USA | 96000

30. Write Query: List passengers whose average fare is greater than the system average.

Expected Output:

full_name | average_fare John Doe | 18000 Takeshi Yamamoto | 16500