NAVIGATING THE SKIES

Crafting a Data-Driven Entry Strategy for India's Aviation Sector

TEAM

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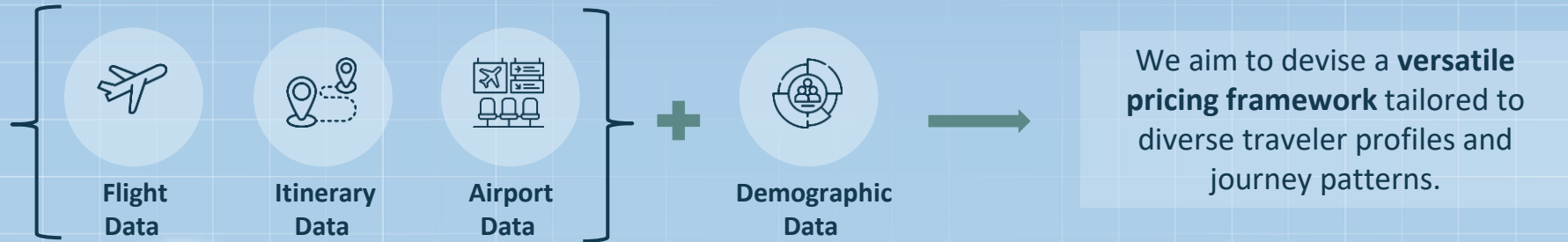
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BUSINESS PROBLEM

Despite the immense potential in the Indian aviation sector, establishing a new airline faces the challenge of setting an **optimal entry price point** amidst fierce competition.

The absence of a **data-driven pricing strategy** hinders effective market penetration and sustainable growth.

New Entrant Challenges

Market Dynamics

Profitability Challenges

Competitive Landscape

OBJECTIVE

To address this, our objective is to develop comprehensive pricing recommendation utilizing advanced SQL analytics.

Flight Data

Itinerary Data

Airport Data

+

Demographic Data

We aim to devise a **versatile pricing framework** tailored to diverse traveler profiles and journey patterns.

This initiative seeks to equip the new airline with a competitive advantage during its market introduction.

DATA SET

Flights Booking & Fares
Number of Records	452,088
Number of Columns	13

Airports in India
Number of Records	344
Number of Columns	20

Indian Cities Demographics
Number of Records	493
Number of Columns	22

**Data Cleaning
Feature Selection
Normalization**

Airlines
Number of Records	1,405
Number of Columns	2

Airports
Number of Records	41
Number of Columns	11

Place
Number of Records	493
Number of Columns	10

Travel_Info
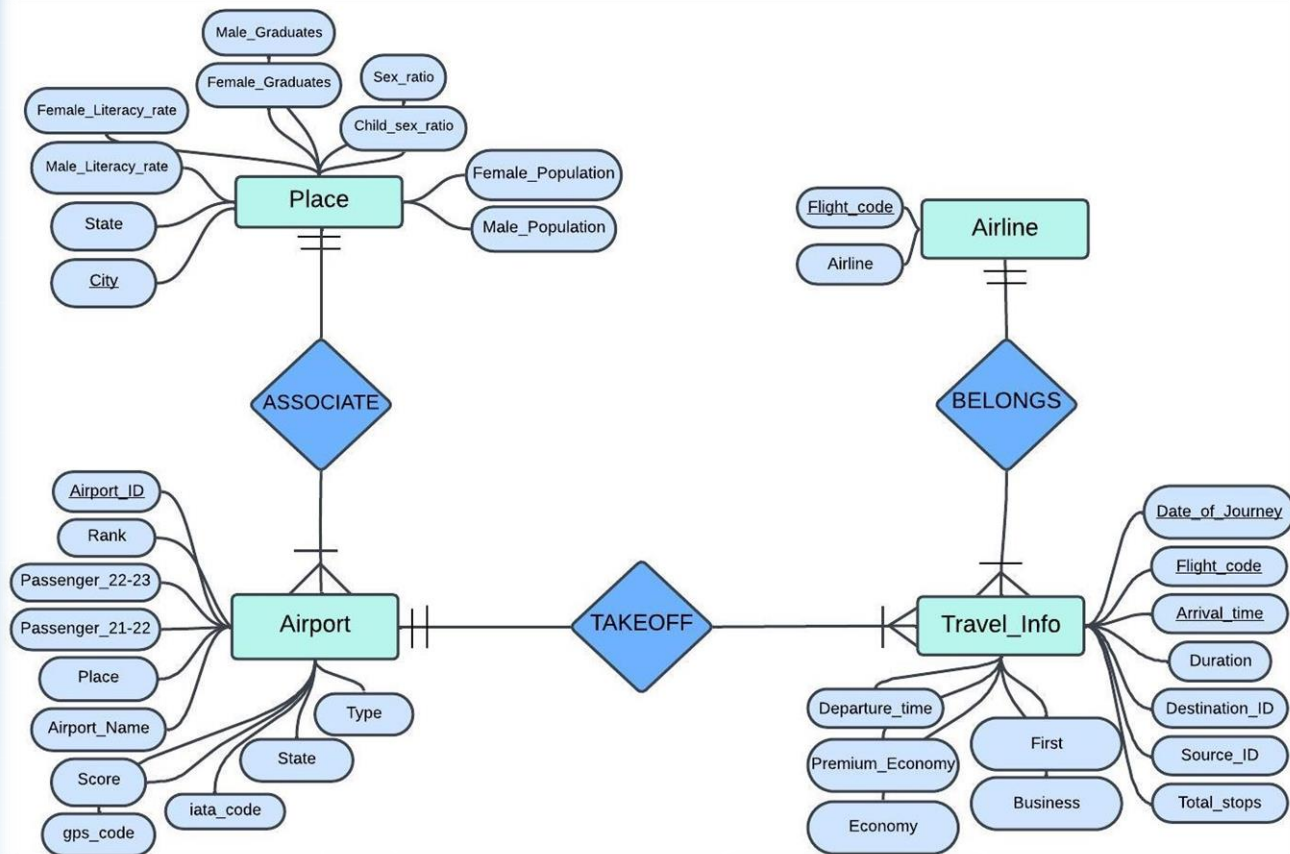|	
Number of Records	10,106
Number of Columns	12

NORMALIZATION PROCESS

0 NF FORM

Date_of_journey	Journey_day	Airline	Flight_code	Class	Source	Departure	Total_stops	Arrival	Destination	Duration_in _hours	Days_left	Fare	Departure Time	Arrival Time	Duration
1/16/2023	Monday	SpiceJet	SG-8169	Economy	Delhi	After 6 PM	non-stop	After 6 PM	Mumbai	2.0833	1	5335	20:00	22:05	02h 05m
1/16/2023	Monday	Indigo	6E-2519	Economy	Delhi	After 6 PM	non-stop	Before 6 AM	Mumbai	2.3333	1	5899	23:00	01:20	02h 20m
1/16/2023	Monday	GO FIRST	G8-354	Economy	Delhi	After 6 PM	non-stop	Before 6 AM	Mumbai	2.1667	1	5801	22:30	00:40	02h 10m
1/16/2023	Monday	SpiceJet	SG-8709	Economy	Delhi	After 6 PM	non-stop	After 6 PM	Mumbai	2.0833	1	5794	18:50	20:55	02h 05m
1/16/2023	Monday	Air India	AI-805	Economy	Delhi	After 6 PM	non-stop	After 6 PM	Mumbai	2.1667	1	5955	20:00	22:10	02h 10m

3 NF FORM

Flight_code	Airline
AI-805	Air India
AI-605	Air India
AI-814	Air India
AI-813	Air India
AI-863	Air India
AI-624	Air India

Date_of_journey	Flight_code	Source_ID	Destination_ID	Total_stops	Departure_Time	Arrival_Time	Duration_in _mins	Business	Economy	First	Premium_ Economy
2/1/2023	9I-301	35141	26434	non-stop	9:35	11:30	115	0	3533	0	0
2/1/2023	9I-302	26434	35141	non-stop	17:00	19:00	120	0	3423	0	0
2/1/2023	9I-517	35145	35141	non-stop	19:40	21:15	95	0	3269	0	0
2/1/2023	9I-518	35141	35145	non-stop	22:00	23:35	95	0	3423	0	0
2/1/2023	9I-695	26555	26431	1-stop	13:15	16:20	185	0	4695	0	0
2/1/2023	9I-696	26431	26555	1-stop	16:50	19:55	185	0	4642	0	0

ENTITY RELATIONSHIP DIAGRAM

Place — Male_Graduates, Female_Graduates, Sex_ratio, Child_sex_ratio, Female_Literacy_rate, Male_Literacy_rate, State, City, Female_Population, Male_Population

Airline — Flight_code, Airline

ASSOCIATE

BELONGS

Airport — Airport_ID, Rank, Passenger_22-23, Passenger_21-22, Place, Airport_Name, Score, gps_code, iata_code, State, Type

TAKEOFF

Travel_Info — Date_of_Journey, Flight_code, Arrival_time, Duration, Destination_ID, Source_ID, Total_stops, Departure_time, Premium_Economy, Economy, First, Business

RELATIONAL DATA MODEL

Airline (Airline, Flight code)

Travel_Info (Date of Journey, Flight code, Source ID, Destination ID, Total_stops, Departure_Time, Arrival_Time, Duration_in_mins, Business, Economy, First, Premium_Economy)

Airports (Airport ID, Airport_name, Place, State, lata_code, GPS_code, Score, Type, Rank, Passengers_2022_23, Passengers_2021_22)

Place (City, State, Population_male, Population_female, Literates_male, Literates_female, Sex_ratio, Child_sex_ratio, Male_graduates, Female_graduates)

QUERIES AND USE CASES

ECONOMY CLASS PRICING ANALYSIS

```
DELIMITER &&
CREATE PROCEDURE GetAvgEconomyPrice (IN Flight_Code VARCHAR(10), IN Source_ID INT)
BEGIN
SELECT a.Airline AS Airline_Name, ap.Airport_name AS Source_Airport_Name, ap.Place AS Source_Place_Name,
AVG(ti.Economy) AS Average_Economy_Price
FROM travel_info ti
INNER JOIN airlines a ON ti.Flight_code = a.Flight_code    INNER JOIN airports ap ON ti.Source_ID = ap.Airport_ID
WHERE ti.Flight_code = Flight_Code AND ti.Source_ID = Source_ID
GROUP BY a.Airline, ap.Airport_name, ap.Place;
END && DELIMITER ;

CALL GetAvgEconomyPrice('9I-894', 26618);
```

To determine the average price of economy class tickets for a specific competitor airline, broken down by source location

Airline_Name	Source_Airport_Name	Source_Place_Name	Average_Economy_Price
AllianceAir	Chennai International Airport	Chennai	4006.2000

COMPETITOR FARE ANALYSIS FOR DIFFERENT LOCATIONS

```
DELIMITER &&
CREATE PROCEDURE GetAirlinesWithPlacesAveragePrice(IN Source_ID INT, IN Destination_ID INT)
BEGIN SELECT a.Airline AS Airline_Name, src_ap.Airport_name AS Source_Airport_Name, src_ap.Place AS Source_Place_Name,
dest_ap.Airport_name AS Destination_Airport_Name, dest_ap.Place AS Destination_Place_Name, AVG(ti.Economy) AS
Average_Economy_Price
FROM travel_info ti
INNER JOIN airlines a ON ti.Flight_code = a.Flight_code
INNER JOIN airports src_ap ON ti.Source_ID = src_ap.Airport_ID
INNER JOIN airports dest_ap ON ti.Destination_ID = dest_ap.Airport_ID
WHERE ti.Source_ID = Source_ID AND ti.Destination_ID = Destination_ID
GROUP BY a.Airline, src_ap.Airport_name, src_ap.Place, dest_ap.Airport_name, dest_ap.Place;
END && DELIMITER ;

CALL GetAirlinesWithPlacesAveragePrice('35145', '35141');
```

To analyze and compare the average ticket prices of competitive airlines based on various factors: source place, source airport, destination place, and destination airport

Airline_Name	Source_Airport_Name	Source_Place_Name	Destination_Airport_Name	Destination_Place_Name	Average_Economy_Price
AirAsia	Kempegowda International Airport	Bangalore	Rajiv Gandhi International Airport	Hyderabad	4351.0654
AkasaAir	Kempegowda International Airport	Bangalore	Rajiv Gandhi International Airport	Hyderabad	2336.6667
AllianceAir	Kempegowda International Airport	Bangalore	Rajiv Gandhi International Airport	Hyderabad	3505.0556
GO FIRST	Kempegowda International Airport	Bangalore	Rajiv Gandhi International Airport	Hyderabad	10846.3529

POPULAR DESTINATIONS FROM SOURCE AIRPORT

```
DELIMITER &&
CREATE PROCEDURE TopDestinationFromSource(IN SourceAirportID INT)
BEGIN
SELECT dest_ap.Airport_name AS Destination_Airport_Name, dest_ap.Place AS Destination_place,
COUNT(ti.Flight_code) AS NumberOfFlights
FROM travel_info ti
INNER JOIN airports dest_ap ON ti.Destination_ID = dest_ap.Airport_ID
WHERE ti.Source_ID = SourceAirportID
GROUP BY ti.Destination_ID, dest_ap.Airport_name, dest_ap.Place
ORDER BY NumberOfFlights DESC
LIMIT 5;
END && DELIMITER ;

CALL TopDestinationFromSource('26434');
```

To identify and rank the top five most popular destination airports based on the number of flights departing for each

Destination_Airport_Name	Destination_place	NumberOfFlights
Indira Gandhi International Airport	Delhi	689
Kempegowda International Airport	Bangalore	364
Netaji Subhash Chandra Bose International Airp...	Kolkata	231
Rajiv Gandhi International Airport	Hyderabad	214
Chennai International Airport	Chennai	136

AIRPORT RANK HIERARCHICAL STRUCTURE
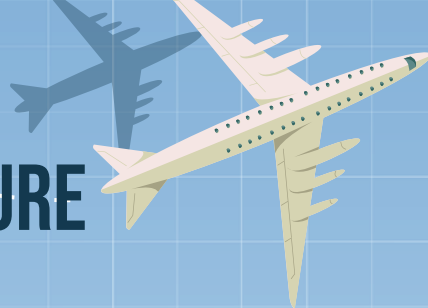
```
WITH RECURSIVE AirportHierarchy AS
(
SELECT Airport_ID, Airport_name, Place, Ranking
FROM airports
WHERE Ranking = (SELECT MIN(Ranking) FROM airports)
UNION ALL
SELECT a.Airport_ID, a.Airport_name, a.Place, a.Ranking
FROM airports a
INNER JOIN AirportHierarchy ah
ON a.Ranking = ah.Ranking + 1
)
SELECT * FROM AirportHierarchy limit 8;
```

To establish a hierarchy of airports based on their popularity

Airport_ID	Airport_name	Place	Ranking
26555	Indira Gandhi International Airport	Delhi	1
26434	Chhatrapati Shivaji International Airport	Mumbai	2
35145	Kempegowda International Airport	Bangalore	3
35141	Rajiv Gandhi International Airport	Hyderabad	4
26618	Chennai International Airport	Chennai	5
26496	Netaji Subhash Chandra Bose International Airp...	Kolkata	6
26431	Sardar Vallabhbhai Patel International Airport	Ahmedabad	7
26609	Cochin International Airport	Kochi	8

AIRPORT RANKING BASED ON LITERACY RATES

```
SELECT a.Airport_ID, a.Airport_name, a.Place, a.ranking,
(SELECT b.literates_male FROM place b WHERE a.Place = b.city) AS
literates_male,
(SELECT b.literates_female FROM place b WHERE a.Place = b.city) AS
literates_female
FROM airports a
ORDER BY literates_male DESC, literates_female DESC
LIMIT 10;
```

To identify and rank the top 10 airports based on the literacy rates of males and females in their respective locations

Airport_ID	Airport_name	Place	ranking	literates_male	literates_female
26434	Chhatrapati Shivaji International Airport	Mumbai	2	5727774	4509812
26555	Indira Gandhi International Airport	Delhi	1	4776490	3806615
35145	Kempegowda International Airport	Bangalore	3	3664959	3110983
35141	Rajiv Gandhi International Airport	Hyderabad	4	2688111	2359594
26431	Sardar Vallabhbhai Patel International Airport	Ahmedabad	7	2459823	2004480
26461	Surat Airport	Surat	38	2082588	1416640
26618	Chennai International Airport	Chennai	5	2004498	1845974
26496	Netaji Subhash Chandra Bose International Airp…	Kolkata	6	1966122	1682088
26455	Pune Airport	Pune	10	1361257	1195486
26563	Jaipur International Airport	Jaipur	13	1282140	990584

AIRPORT TRAFFIC ANALYSIS

```
SELECT
a.Airport_ID, a.Airport_name, a.Place, a.Passengers_2022_23 as passengertraffic_2022_23,
(SELECT b.population_male FROM place b WHERE a.Place = b.city) AS population_male,
(SELECT b.population_female FROM place b WHERE a.Place = b.city) AS population_female
FROM airports a
ORDER BY population_male DESC, population_female DESC
LIMIT 10;
```

To ascertain and rank the top 10 airports based on their passenger traffic

Airport_ID	Airport_name	Place	passengertraffic_2022_23	population_male	population_female
26434	Chhatrapati Shivaji International Airport	Mumbai	4,39,30,298	6736815	5741632
26555	Indira Gandhi International Airport	Delhi	6,53,27,833	5871362	5136473
35145	Kempegowda International Airport	Bangalore	3,19,11,429	4401299	4024671
35141	Rajiv Gandhi International Airport	Hyderabad	2,09,96,027	3500802	3309168
26431	Sardar Vallabhbhai Patel International Airport	Ahmedabad	1,01,37,001	2935869	2634716
26461	Surat Airport	Surat	12,39,913	2538243	1923759
26496	Netaji Subhash Chandra Bose International Airp...	Kolkata	1,77,68,862	2362662	2124017
26618	Chennai International Airport	Chennai	1,85,71,393	2357633	2323454
26563	Jaipur International Airport	Jaipur	47,64,382	1619280	1454070
26455	Pune Airport	Pune	80,07,160	1602137	1513294

ANALYSIS OF AIRPORT PEAK DEPARTURE TIMES

```
WITH DepartureArrivalTimes AS
(SELECT a.Airport_name, EXTRACT(HOUR FROM t.Departure_Time) AS
DepartureHour,
COUNT(*) OVER (PARTITION BY a.Airport_ID, EXTRACT(HOUR FROM
t.Departure_Time)) AS DepartureCount, COUNT(*) OVER (PARTITION BY
a.Airport_ID, EXTRACT(HOUR FROM t.Arrival_Time)) AS ArrivalCount
FROM travel_info t
JOIN Airports a ON t.Source_ID = a.Airport_ID OR t.Destination_ID =
a.Airport_ID ),
RankedDepartureTimes AS
(SELECT Airport_name, DepartureHour, DepartureCount,
RANK() OVER (PARTITION BY Airport_name ORDER BY DepartureCount DESC)
AS DepartureRank
FROM DepartureArrivalTimes )
SELECT DISTINCT d.Airport_name, CONCAT(d.DepartureHour,":00") AS
BestDepartureHour
FROM RankedDepartureTimes d
WHERE d.DepartureRank = 1
ORDER BY d.Airport_name;
```

To identify the busiest departure times at various airports

Airport_name	BestDepartureHour
Chennai International Airport	6:00
Chhatrapati Shivaji International Airport	20:00
Indira Gandhi International Airport	5:00
Kempegowda International Airport	16:00
Netaji Subhash Chandra Bose International Airp...	16:00
Rajiv Gandhi International Airport	11:00
Sardar Vallabhbhai Patel International Airport	9:00

WEEKDAY FLIGHT FREQUENCY ANALYSIS

```
WITH DailyFlights AS
(SELECT DAYNAME(STR_TO_DATE(t.Date_of_journey, '%d-%m-
%Y')) AS Weekday, s.Airport_name AS SourceAirport,
d.Airport_name AS DestinationAirport, COUNT(*) AS
FlightsOnDay
FROM travel_info t
JOIN airports s ON t.Source_ID = s.Airport_ID
JOIN airports d ON t.Destination_ID = d.Airport_ID
GROUP BY Weekday, SourceAirport, DestinationAirport),
RankedFlights AS ( SELECT Weekday, SourceAirport,
DestinationAirport, AVG(FlightsOnDay) AS AvgFlights,
RANK() OVER (PARTITION BY Weekday ORDER BY
AVG(FlightsOnDay) DESC) AS Day_Rank
FROM DailyFlights
GROUP BY Weekday, SourceAirport, DestinationAirport)
SELECT Weekday, SourceAirport, DestinationAirport, AvgFlights
FROM RankedFlights WHERE Day_Rank <= 3
ORDER BY Weekday, Day_Rank;
```

To determine the average number of flights operating from a specific source to a destination airport on a given weekday

Weekday	SourceAirport	DestinationAirport	AvgFlights
Friday	Kempegowda International Airport	Indira Gandhi International Airport	173.0000
Friday	Indira Gandhi International Airport	Kempegowda International Airport	158.0000
Friday	Indira Gandhi International Airport	Chhatrapati Shivaji International Airport	128.0000
Monday	Kempegowda International Airport	Indira Gandhi International Airport	175.0000
Monday	Indira Gandhi International Airport	Kempegowda International Airport	157.0000
Monday	Indira Gandhi International Airport	Chhatrapati Shivaji International Airport	132.0000
Saturday	Kempegowda International Airport	Indira Gandhi International Airport	176.0000
Saturday	Indira Gandhi International Airport	Kempegowda International Airport	158.0000
Saturday	Indira Gandhi International Airport	Chhatrapati Shivaji International Airport	131.0000
Sunday	Kempegowda International Airport	Indira Gandhi International Airport	116.0000
Sunday	Indira Gandhi International Airport	Kempegowda International Airport	108.0000
Sunday	Indira Gandhi International Airport	Chhatrapati Shivaji International Airport	96.0000
Thursday	Kempegowda International Airport	Indira Gandhi International Airport	178.0000
Thursday	Indira Gandhi International Airport	Kempegowda International Airport	157.0000
Thursday	Indira Gandhi International Airport	Chhatrapati Shivaji International Airport	141.0000
Tuesday	Kempegowda International Airport	Indira Gandhi International Airport	116.0000
Tuesday	Indira Gandhi International Airport	Kempegowda International Airport	104.0000
Tuesday	Chhatrapati Shivaji International ...	Indira Gandhi International Airport	89.0000
Wednes...	Kempegowda International Airport	Indira Gandhi International Airport	117.0000
Wednes...	Indira Gandhi International Airport	Kempegowda International Airport	104.0000
Wednes...	Chhatrapati Shivaji International ...	Indira Gandhi International Airport	89.0000

POPULARITY RANKING OF AIRLINES BY DESTINATION

```
WITH FlightCounts AS (
SELECT a.Airline AS airline, ti.destination_id AS destination,
ap.Place, COUNT(*) AS flights_count
FROM travel_Info ti
JOIN airlines a ON ti.flight_code = a.flight_code
JOIN airports ap ON ap.airport_ID = ti.destination_id
GROUP BY a.Airline, ti.destination_id, ap.Place),

RankedAirlines AS
(SELECT airline, destination, Place, flights_count,
RANK() OVER(PARTITION BY destination ORDER BY
flights_count DESC) AS rank_destination
FROM FlightCounts)

SELECT destination, Place, airline, flights_count,
rank_destination
FROM RankedAirlines
WHERE rank_destination <= 3;
```

To rank airlines based on their popularity for specific destinations

destination	Place	airline	flights_count	rank_destination
26431	Ahmedabad	GO FIRST	291	1
26431	Ahmedabad	AkasaAir	89	2
26431	Ahmedabad	AllianceAir	18	3
26434	Mumbai	GO FIRST	809	1
26434	Mumbai	AirAsia	770	2
26434	Mumbai	AkasaAir	221	3
26496	Kolkata	AirAsia	659	1
26496	Kolkata	GO FIRST	439	2
26555	Delhi	GO FIRST	1286	1
26555	Delhi	AirAsia	1131	2
26555	Delhi	AkasaAir	51	3
26618	Chennai	AirAsia	549	1
26618	Chennai	GO FIRST	162	2
26618	Chennai	AkasaAir	122	3
35141	Hyderabad	AirAsia	895	1
35141	Hyderabad	GO FIRST	136	2
35141	Hyderabad	AllianceAir	57	3
35145	Bangalore	AirAsia	1301	1
35145	Bangalore	GO FIRST	732	2
35145	Bangalore	AkasaAir	296	3

POPULAR AIRLINES BASED ON FLIGHT FREQ. FROM A SOURCE

```
WITH AirlineFlightCounts AS
(SELECT ti.Source_ID, a.Airline, COUNT(ti.Flight_code) AS
FlightCount, AVG(ti.Economy) AS AvgEconomyPrice
FROM travel_info ti
JOIN airlines a ON ti.Flight_code = a.Flight_code
GROUP BY ti.Source_ID, a.Airline),
RankedAirlines AS
(SELECT Source_ID, Airline, FlightCount, AvgEconomyPrice,
RANK() OVER (PARTITION BY Source_ID ORDER BY
FlightCount DESC) AS rank_airline
FROM AirlineFlightCounts)
SELECT ra.Source_ID, ap.Airport_name AS Airport_Name,
ra.Airline, ra.FlightCount, ra.AvgEconomyPrice,
ra.rank_airline
FROM RankedAirlines ra
JOIN airports ap ON ra.Source_ID = ap.Airport_ID
ORDER BY ra.Source_ID, ra.rank_airline;
```

To rank airlines based on the average number of flights they operate from a given source airport

Source_ID	Airport_Name	Airline	FlightCount	AvgEconomyPrice	rank_airline
26431	Sardar Vallabhbhai Patel International Airport	GO FIRST	496	6230.6089	1
26431	Sardar Vallabhbhai Patel International Airport	AkasaAir	105	4192.8095	2
26431	Sardar Vallabhbhai Patel International Airport	AllianceAir	17	4642.0000	3
26434	Chhatrapati Shivaji International Airport	GO FIRST	810	6725.7481	1
26434	Chhatrapati Shivaji International Airport	AirAsia	732	5768.0779	2
26434	Chhatrapati Shivaji International Airport	AkasaAir	219	3112.5023	3
26434	Chhatrapati Shivaji International Airport	AllianceAir	6	3773.0000	4
26496	Netaji Subhash Chandra Bose International Airp...	AirAsia	890	7698.3011	1
26496	Netaji Subhash Chandra Bose International Airp...	GO FIRST	541	9423.8447	2
26555	Indira Gandhi International Airport	AirAsia	1509	7425.2876	1
26555	Indira Gandhi International Airport	GO FIRST	1085	7769.2866	2
26555	Indira Gandhi International Airport	AkasaAir	54	4848.7778	3
26555	Indira Gandhi International Airport	AllianceAir	18	4695.0000	4
26618	Chennai International Airport	AirAsia	269	4529.2900	1
26618	Chennai International Airport	AkasaAir	124	2583.8790	2
26618	Chennai International Airport	GO FIRST	123	7642.6098	3
26618	Chennai International Airport	AllianceAir	15	4006.2000	4
35141	Rajiv Gandhi International Airport	AirAsia	707	5427.5530	1
35141	Rajiv Gandhi International Airport	GO FIRST	73	5761.1781	2
35141	Rajiv Gandhi International Airport	AllianceAir	57	3899.1053	3
35141	Rajiv Gandhi International Airport	AkasaAir	17	2690.8235	4
35145	Kempegowda International Airport	AirAsia	1198	6533.0551	1
35145	Kempegowda International Airport	GO FIRST	727	7354.0316	2
35145	Kempegowda International Airport	AkasaAir	278	3110.8094	3
35145	Kempegowda International Airport	AllianceAir	36	3505.0556	4

FLIGHT DURATION AND PRICING CORRELATION ANALYSIS

```
CREATE VIEW DurationPricing AS
SELECT
ti.destination_ID,
AVG(ti.economy) AS average_price,
AVG(duration_in_mins) AS average_duration
FROM travel_Info ti
GROUP BY ti.destination_ID;

SELECT
    dp.destination_ID AS Destination_ID,
    ap.place AS Destination,
    dp.average_price,
    dp.average_duration
FROM DurationPricing dp
JOIN airports ap ON ap.airport_ID = dp.destination_id
ORDER BY average_duration DESC;
```

Destination_ID	Destination	average_price	average_duration
26496	Kolkata	7870.3825	549.3989
26555	Delhi	7508.3602	536.6036
35141	Hyderabad	6047.0416	519.7604
26618	Chennai	5226.8988	510.7765
26434	Mumbai	6355.3300	466.6999
35145	Bangalore	6421.5899	427.8142
26431	Ahmedabad	5176.8945	251.6206

To examine the relationship between flight duration and ticket pricing across different airlines

ANALYSIS OF TRAFFIC BY AIRPORT CATEGORY AND SIZE

```
SELECT
CASE
WHEN Airport_name REGEXP '[Ii]nternational'
THEN 'International'
ELSE 'Domestic'
END AS Airport_Category, type AS Size_Category,
SUM(Passengers_2022_23) AS Total_Passengers_2022_23,
SUM(Passengers_2021_22) AS Total_Passengers_2021_22
FROM     airports
GROUP BY     Airport_Category, Size_Category
ORDER BY     Airport_Category, Size_Category;
```

To evaluate the scalability of airports by analyzing passenger counts for domestic and international flights in relation to airport size.

Airport_Category	Size_Category	Total_Passengers_2022_23	Total_Passengers_2021_22	Percentage_Growth
Domestic	medium_airport	44095752	28524152	54.59
Domestic	small_airport	5671919	3640981	55.78
International	large_airport	213312958	118129479	80.58
International	medium_airport	34513994	20466637	68.64

SUMMARY OF SQL TECHNIQUES UTILIZED

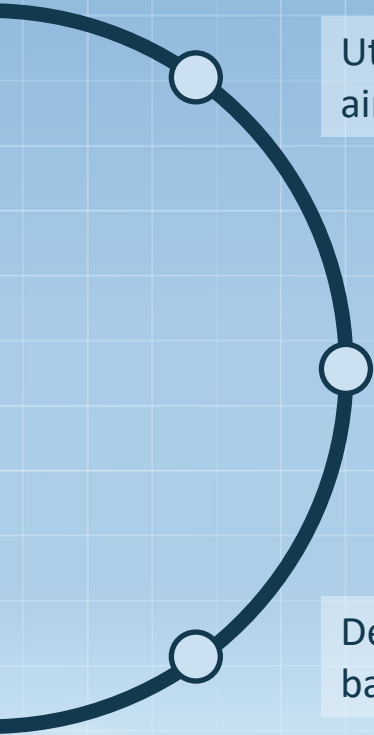|				
Advanced Joins	Aggregations	Subqueries	Partition	Window Functions
CTEs	Recursive CTEs	Time Functions	Case When	REGEXP

KEY TAKEAWAYS

Utilized advanced SQL analytics to process comprehensive flight itinerary and airport data, augmented by demographic insights

Devised a strategic entry price point for a new airline in the Indian aviation sector

Delivered a multifaceted pricing framework, route analysis, and airport ranking based on various parameters for informed decision-making
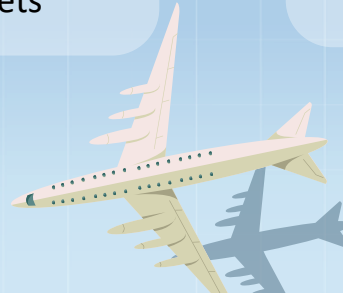
LEARNINGS

- Importance of data integrity and the impact of data quality on analytical outcomes

- Advanced SQL techniques (e.g., CTEs, window functions, aggregations) for deep market insights

- The significance of understanding market dynamics and consumer behavior in pricing strategies

- Role of data-driven decision-making in establishing competitive advantages in challenging markets

THANK YOU!

DATABASE IMPLEMENTATION

We imported our Excel-based research database into MySQL using the Import Data Wizard:

- Access the wizard in MySQL Workbench under the "Server" menu > "Data Import" > "Import from Self-Contained File."

- Select the Excel file from the Airlines directory.

- Specify the target schema and database or create new ones.

- Map columns and configure options like data type alignment.

- Begin the data import process.