

# Queries and Outputs

Lab Group 1

Team ID - 110

Topic - Airport Management System

## 1. Retrieve all employees working in a department with the department code "DEL".

```
SELECT EmpID, FlightNo, Airline_Name FROM  
EmpAssignedTo AS e JOIN Flight AS f ON e.FlightNo = f.Flight_No  
WHERE Departure_Airport_Code = 'DEL';
```

	empid character varying	flightno character varying	airline_name character varying
1	E209	BR345	British Airways
2	E195	QR4775	Qatar Airways
3	E221	SG8157	SPICEJET

## 2. Retrieve all the flight information for flights departing from Ahmedabad (AMD) and arriving at Delhi (DEL) on May 4, 2024.

```
SELECT Flight_No, Airline_Name, Departure_Time, Reach_Time FROM Flight  
WHERE arrival_airport_Code= 'DEL' AND departure_airport_Code = 'AMD' AND  
Date(Departure_time) = '2024-05-04';
```

	flight_no [PK] character varying	airline_name character varying	capacity integer	departure_time timestamp without time zone	reach_time timestamp without time zone	arrival_airport_code character varying	arrival_terminal_no character
1	SG8194	SPICEJET	159	2024-05-04 06:10:00	2024-05-04 07:50:00	DEL	T2
2	6E5079	INDIGO	180	2024-05-04 09:45:00	2024-04-05 11:15:00	DEL	T1

**3. Find all flights operated by a specific airline.**

```
SELECT Flight_No, Airline_Name FROM Flight
WHERE Airline_Name = 'SPICEJET';
```

Data Output

Messages

Notifications

flight\_no

[PK] character varying

airline\_name

character varying

1	SG8194	SPICEJET
2	SG611	SPICEJET
3	SG106	SPICEJET
4	SG8158	SPICEJET
5	SG8157	SPICEJET

**4. Give information for flights departing on 4 May 2024 in ascending order of departure time.**

```
SELECT
Flight_No, Airline_Name, Arrival_Airport_Code, Departure_Airport_Code,
Departure_Time FROM Flight
WHERE DATE(Departure_time) = '2024-05-04'
ORDER BY Departure_time ASC;
```

Data Output Messages Notifications					
	flight_no [PK] character varying	airline_name character varying	arrival_airport_code character varying	departure_airport_code character varying	departure_time timestamp without time zone
1	I5762	AIRINDIA	AMD	JAI	2024-05-04 00:50:00
2	SG8194	SPICEJET	DEL	AMD	2024-05-04 06:10:00
3	LX461	SWISS Airways	FRA	LCY	2024-05-04 09:10:00
4	6E5079	INDIGO	DEL	AMD	2024-05-04 09:45:00
5	EK509	Emirates	LCY	BOM	2024-05-04 22:20:00

## 5. Get all transactions made using a specific payment method.

```
SELECT * FROM Transaction
WHERE PaymentMethod = 'Internet Banking';
```

Data Output Messages Notifications				
	transactionid [PK] character	date date	paymentmethod character varying	amount numeric (6,2)
1	TRX25784	2024-04-06	Internet Banking	9000.00
2	TRX00835	2024-04-08	Internet Banking	6000.00
3	TRX48562	2024-04-09	Internet Banking	8000.00
4	TRX67354	2024-03-21	Internet Banking	6000.00
5	TRX30586	2024-04-07	Internet Banking	6000.00
6	TRX38474	2024-04-10	Internet Banking	8500.00

## 6. List all employees along with their department name.

```
SELECT Employee.Emp_ID, Employee.Name, Employee.DOB, Employee.Salary,
Employee.GENDER, Department.Dept_Name
FROM Employee
INNER JOIN Department ON Employee.DeptNo = Department.Dept_No;
```

	emp_id character varying	name character varying (30)	dob date	salary integer	gender character	dept_name character varying
1	E101	Ramesh Tiwari	1990-05-02	50000	M	Passenger Handling
2	E102	Raj Patel	1995-07-21	50000	M	Flight Operations
3	E103	Arjun Sharma	1992-10-02	50000	M	Flight Crew
4	E104	Nisha Singh	1990-11-06	50000	F	Air Traffic Control
5	E105	Aarti Kapoor	1991-12-01	50000	F	Finance and Administration
6	E106	Kushank Mandal	1995-08-24	45000	M	Passenger Handling
7	E107	Kishan Patel	1995-08-24	45000	M	Flight Operations
8	E108	Devanshi Verma	1995-08-24	45000	F	Flight Crew
9	E109	Meghpal Jadeja	1995-08-24	45000	M	Air Traffic Control
10	E110	Varun Rana	1995-08-24	45000	M	Finance and Administration
11	E111	Amee Mehta	1995-08-24	45000	F	Passenger Handling
12	E112	Aakash Singh	1991-09-15	65000	M	Air Traffic Control
13	E113	Kushal Makvana	1995-08-24	45000	M	Passenger Handling
14	E114	Lisha Sharma	1991-09-22	45000	F	Flight Operations
15	E115	Prisha Parekh	1993-08-01	45000	M	Flight Crew
16	E116	Gautam Shah	1990-08-14	45000	M	Air Traffic Control
17	E117	Niten Das	1988-04-24	45000	M	Finance and Administration
18	E118	Aditya Banerjee	1988-02-12	45000	M	Passenger Handling
19	E119	Kiran Sharma	1988-07-19	45000	F	Passenger Handling
Total rows: 128 of 128    Query complete 00:00:00.101						

## 7. Retrieve all tickets issued along with the corresponding passenger and flight information.

```

SELECT Ticket.Ticket_ID, Ticket.Price, Ticket.Date_Of_Issue, Ticket.TransactionID,
Ticket.Flight_No, Ticket.PID, Passenger.Name AS Passenger_Name, Flight.Departure_Time,
Flight.Reach_Time
FROM Ticket
INNER JOIN Passenger ON Ticket.PID = Passenger.PID
INNER JOIN Flight ON Ticket.Flight_No = Flight.Flight_No;

```

	ticket_id character varying	price numeric (6,2)	date_of_issue timestamp without time zone	transactionid character	flight_no character varying	pid character varying	passenger_name character varying (30)	departure_time timestamp without time zone	reach_time timestamp without time zone
1	TCKT001	2500.00	2024-04-02 00:00:00	TRX14352	6E5079	P001	Sneha Gupta	2024-05-04 09:45:00	2024-04-05 11:15:0
2	TCKT002	2200.00	2024-04-10 00:00:00	TRX22354	SG8194	P002	Vivek Singh	2024-05-04 06:10:00	2024-05-04 07:50:0
3	TCKT003	3000.00	2024-04-04 00:00:00	TRX32114	EK501	P003	Sachin Pawar	2024-06-08 04:30:00	2024-06-05 13:15:0
4	TCKT004	2800.00	2024-04-06 00:00:00	TRX25784	QR4773	P004	Neha Jain	2024-06-08 21:45:00	2024-06-09 06:55:0
5	TCKT005	2700.00	2024-03-31 00:00:00	TRX67227	AI859	P005	Karthik Iyer	2024-05-21 01:30:00	2024-05-21 05:55:0
6	TCKT006	2900.00	2024-04-09 00:00:00	TRX85646	QP1486	P006	Vishal Rajput	2024-07-17 13:50:00	2024-07-18 10:46:0
7	TCKT007	2700.00	2024-04-08 00:00:00	TRX00835	6E2282	P007	Rajiv Chauhan	2024-07-17 02:00:00	2024-07-18 20:44:0
8	TCKT008	2500.00	2024-04-13 00:00:00	TRX27567	6E685	P008	Riya Gill	2024-07-17 16:45:00	2024-07-18 14:32:0
9	TCKT009	2200.00	2024-04-09 00:00:00	TRX48562	SG611	P009	Kirthy Thevar	2024-05-01 10:45:00	2024-05-01 13:00:0
10	TCKT010	2800.00	2024-04-17 00:00:00	TRX28472	EK513	P010	Rajesh Kumar	2024-07-17 04:15:00	2024-07-17 17:20:0
11	TCKT011	2600.00	2024-03-29 00:00:00	TRX23407	UA9715	P011	Anshu Grover	2024-07-17 20:30:00	2024-07-18 17:25:0
12	TCKT012	2400.00	2024-03-21 00:00:00	TRX67354	LX461	P012	Anjali Mishra	2024-05-04 09:10:00	2024-05-04 13:55:0
13	TCKT013	2700.00	2024-03-19 00:00:00	TRX68573	IS762	P013	Aryan Joshi	2024-05-04 00:50:00	2024-05-04 16:50:0
14	TCKT014	3000.00	2024-03-28 00:00:00	TRX10284	EK509	P014	Rajiv Verma	2024-05-04 22:20:00	2024-05-05 13:15:0
15	TCKT015	2800.00	2024-04-07 00:00:00	TRX04537	QR4771	P015	Nisha Reddy	2024-06-08 04:20:00	2024-06-08 20:55:0
16	TCKT016	2900.00	2024-04-07 00:00:00	TRX30586	QR4791	P016	Mukti Rai	2024-06-08 04:35:00	2024-06-08 20:55:0
17	TCKT017	2700.00	2024-04-08 00:00:00	TRX53967	AI538	P017	Kunti Nair	2024-06-08 20:40:00	2024-06-08 23:25:0
18	TCKT018	2200.00	2024-04-09 00:00:00	TRX23856	SG106	P018	Anjana Sridhar	2024-05-21 20:55:00	2024-05-22 11:00:0
Total rows: 20 of 20    Query complete 00:00:00.076									

## 8. What are the flight numbers along with their departure gate numbers and arrival gate numbers for flights departing from the 'AMD' airport on May 4, 2024?

```
SELECT Flight_No, Departure_Gate_No, Arrival_Gate_No FROM Flight
WHERE Departure_Airport_Code = 'AMD' AND DATE(Departure_Time) = '2024-05-04';
```

Data Output Messages Notifications			
	flight_no [PK] character varying	departure_gate_no integer	arrival_gate_no integer
1	6E5079	5	2
2	SG8194	2	4

**9. List the passengers' IDs and names along with the total weight of their luggage, where the total weight of luggage for each passenger exceeds or equals 32 kilograms.**

```
SELECT Passenger.PID, Passenger.Name, SUM(Luggage.Weight) AS Total_Weight
FROM Passenger
LEFT JOIN Luggage ON Passenger.PID = Luggage.PID
GROUP BY Passenger.PID, Passenger.Name
HAVING SUM(Luggage.Weight) >= 32;
```

Data Output Messages Notifications			
	pid [PK] character varying	name character varying (30)	total_weight numeric
1	P017	Kunti Nair	35.000
2	P007	Rajiv Chauhan	33.500

**10. List all flights along with their departure and arrival airports' information.**

```
SELECT Flight_No, Departure_Airport_Code, DATE(Departure_Time), Arrival_Airport_Code,
DATE(Reach_Time)
FROM Flight;
```

Data Output

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Notifications

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	flight_no [PK] character varying	departure_airport_code character varying	date date	arrival_airport_code character varying	date date
1	6E5079	AMD	2024-05-04	DEL	2024-04-05
2	SG8194	AMD	2024-05-04	DEL	2024-05-04
3	EK501	BOM	2024-06-08	FRA	2024-06-05
4	QR4773	BOM	2024-06-08	FRA	2024-06-09
5	AI859	BOM	2024-05-21	JAI	2024-05-21
6	QP1486	MAA	2024-07-17	TPA	2024-07-18
7	6E2282	DEL	2024-07-17	TPA	2024-07-18
8	6E685	BOM	2024-07-17	TPA	2024-07-18
9	SG611	AMD	2024-05-01	MAA	2024-05-01

Total rows: 31 of 31

Query complete 00:00:00.126

## 11. Retrieve the average salary of employees in each department.

```
SELECT Department.Dept_Name, CAST(AVG(Employee.Salary) AS INT) AS Avg_Salary
FROM Department
LEFT JOIN Employee ON Department.Dept_No = Employee.DeptNo
GROUP BY Department.Dept_Name;
```

	dept_name character varying	avg_salary integer
1	Sales and Marketing	70333
2	Air Traffic Control	56682
3	Finance and Administration	56900
4	Flight Crew	58241
5	Passenger Handling	55800
6	Flight Operations	58696

## 12. Find the total number of flights departing from each airport.

```
SELECT Airport_Code, A.Airport_Name, COUNT(Flight.Flight_No) AS Total_Flights
FROM Flight
INNER JOIN Airport AS A ON Flight.Departure_Airport_Code = A.Airport_Code
GROUP BY A.Airport_Code, A.Airport_Name;
```

Data Output Messages Notifications			
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	airport_code [PK] character varying	airport_name character varying	total_flights bigint
1	MAA	Chennai International Airport	7
2	FRA	Frankfurt Airport	1
3	DEL	Indira Gandhi International Airport	6
4	JAI	Jaipur International Airport	2
5	JFK	John F. Kennedy International Airport	2
6	LCY	London City Airport	1
7	AMD	Sardar Vallabhbhai Patel International Airport	5
8	BOM	Chhatrapati Shivaji Maharaj International Airport	7
Total rows: 8 of 8 Query complete 00:00:00.184			

**13. Find the number of tickets issued for each flight along with the total revenue generated.**

```
SELECT Ticket.Flight_No, COUNT(Ticket.Ticket_ID) AS Num_Tickets,
SUM(Ticket.Price) AS Total_Revenue
FROM Ticket
GROUP BY Ticket.Flight_No;
```

	flight_no character varying	num_tickets bigint	total_revenue numeric
1	SG106	5	11000.00
2	QR4791	1	2900.00
3	EK513	1	2800.00
4	SG8194	1	2200.00
5	AI538	1	2700.00
6	6E2282	1	2700.00
7	6E685	1	2500.00
8	QP1346	1	2700.00
9	UA9715	1	2600.00
10	6E1431	1	2800.00
11	SG611	1	2200.00
12	I5762	1	2700.00
13	QP1486	1	2900.00
14	AI859	1	2700.00
15	LX461	1	2400.00
16	QR4773	3	8400.00
17	QR4771	1	2800.00
18	6E5079	4	10000.00
19	EK509	1	3000.00
Total rows: 20 of 20		Query complete 00:00:00.105	

#### 14. Find the busiest terminal in terms of the number of flights.

```

SELECT Terminal.Terminal_No, Terminal.Airport_Code,
COUNT(Flight.Flight_No) AS Num_Flights
FROM Terminal
INNER JOIN Flight ON Terminal.Terminal_No = Flight.Departure_Terminal_No AND
Terminal.Airport_Code = Flight.Departure_Airport_Code
GROUP BY Terminal.Terminal_No, Terminal.Airport_Code
ORDER BY Num_Flights DESC
LIMIT 1;

```

Data Output	Messages	Notifications
terminal_no [PK] character	airport_code [PK] character varying	num_flights bigint
1	T1	DEL
		4



**15. List the employees who are assigned to operate flights for a specific airline(Qatar Airways).**

```
SELECT E.Name, D.DEPT_NO, D.Dept_Name, A.Airline_Name FROM Employee AS E
INNER JOIN EmpAssignedTo AS ET ON E.Emp_ID = ET.EmpID
INNER JOIN Department AS D ON D.Dept_No=E.DeptNo
INNER JOIN Airlines AS A ON E.Airline_Name = A.Airline_Name
WHERE A.Airline_Name = 'Qatar Airways';
```

Data Output Messages Notifications				
	name character varying (30)	dept_no character varying (5)	dept_name character varying	airline_name character varying
1	Jainish Sharma	DEP03	Flight Crew	Qatar Airways
2	Rohan Verma	DEP03	Flight Crew	Qatar Airways

**16. Find the average salary of male and female employees separately for a particular airport('DEL').**

```
SELECT Gender, COUNT(Gender), CAST(AVG(Salary) AS INT) AS Avg_Salary
FROM Employee WHERE Airport_Code = 'DEL'
GROUP BY Gender;
```

Data Output Messages Notifications			
	gender character	count bigint	avg_salary integer
1	M	26	68885
2	F	23	61130

**17. List all flight numbers along with the total luggage weight on each flight.**

```
SELECT DISTINCT flight.Flight_No, SUM(Luggage.Weight) AS Total_Luggage_Weight
FROM Flight
LEFT JOIN Ticket ON Flight.Flight_No = Ticket.Flight_No
LEFT JOIN Passenger ON Ticket.PID = Passenger.PID
```

```

LEFT JOIN Luggage ON Passenger.PID = Luggage.PID
GROUP BY flight.Flight_No ,Luggage.Weight
HAVING Luggage.Weight IS NOT NULL
ORDER BY Total_Luggage_Weight DESC;

```

	flight_no [PK] character varying	total_luggage_weight numeric
1	SG106	110.750
2	6E5079	61.000
3	AI538	35.000
4	QR4773	34.000
5	6E2282	33.500
6	QR4773	30.250
7	QP1486	28.500
8	I5762	27.250
9	UA9715	26.800
10	SG8194	24.300
11	LX461	21.500
12	SG611	18.000
13	QP1346	17.000
14	6E685	15.500
15	QR4791	15.500
16	6E1431	13.500
17	AI859	12.750
18	EK513	12.600
19	EK501	10.000
Total rows: 21 of 21    Query complete 00:00:00.135		

**18. Display passengers have boarding passes for flights on May 21, 2024, along with the corresponding ticket IDs.**

```

SELECT P.Name, B.TID FROM Passenger AS P
INNER JOIN Boarding_Pass AS B ON P.PID = B.PID
WHERE DATE(B.BoardingTime)='2024-05-21';

```

Data Output    Messages    Notifications		
	name character varying (30)	tid character varying
1	Karthik Iyer	TCKT005
2	Anjana Sridhar	TCKT018
3	Mohit Ramakrishnan	TCKT019

**19. Find the total revenue earned from ticket sales on a specific date:  
What is the total revenue generated from transactions made on April 7, 2024, considering the amounts recorded in the TRANSACTION table?**

```

SELECT SUM(TR.Amount) AS Total_Revenue
FROM TRANSACTION AS TR
WHERE TR.Date = '2024-04-07';

```

Data Output		Messages	Notifications
	<b>total_revenue</b> numeric		
1	12000.00		

**20. Retrieve the names and capacities of airlines along with the total number of flights operated by each airline.**

```
SELECT A.Airline_Name, F.Capacity, COUNT(F.Flight_No) AS Total_Flights
FROM Airlines AS A
LEFT JOIN Flight AS F ON A.Airline_Name = F.Airline_Name
GROUP BY A.Airline_Name, F.Capacity;
```

Data Output		Messages	Notifications
	<b>airline_name</b> character varying	<b>capacity</b> integer	<b>total_flights</b> bigint
1	Emirates	162	5
2	ALASKA	180	4
3	Qatar Airways	190	6
4	British Airways	169	2
5	INDIGO	180	3
6	SWISS Airways	150	2
7	SPICEJET	159	5
8	AIRINDIA	185	4

Total rows: 8 of 8    Query complete 00:00:00.109

**21. List the flight numbers, airport code and departure times for flights departing from terminals of a specific type.**

```
SELECT F.Flight_No, T.Airport_Code, F.Departure_Time FROM Flight AS F
INNER JOIN Terminal AS T ON F.Departure_Terminal_No = T.Terminal_No AND
F.Departure_Airport_Code = T.Airport_Code
WHERE T.Terminal_Type = 'International';
```

Data Output

Messages

Notifications

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	<div>flight_no</div> <div>character varying </div>	<div>airport_code</div> <div>character varying </div>	<div>departure_time</div> <div>timestamp without time zone </div>
3	QP1486	MAA	2024-07-17 13:50:00
4	6E685	BOM	2024-07-17 16:45:00
5	I5762	JAI	2024-05-04 00:50:00
6	QR4791	BOM	2024-06-08 04:35:00
7	AI538	MAA	2024-06-08 20:40:00
8	6E1431	AMD	2024-05-21 23:05:00
9	6E797	AMD	2024-05-02 23:15:00
10	IX769	JAI	2024-05-21 06:15:00
11	SG8158	BOM	2024-06-05 09:05:00

Total rows: 11 of 11

Query complete 00:00:00.064

## 22. Find the number of flights departing from each city.









```
SELECT A.CITY, COUNT(F.Flight_No) AS Num_Flights FROM Flight AS F
INNER JOIN Airport AS A ON F.Departure_Airport_Code = A.Airport_Code
GROUP BY A.CITY;
```

Data Output	Messages	Notifications
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	city character varying	num_flights bigint
1	MUMBAI	7
2	AHMEDABAD	5
3	JAIPUR	2
4	NEW DELHI	6
5	CHENNAI	7
6	Frankfurt	1
7	New York City	2
8	London City	1
Total rows: 8 of 8		Query complete 00:00:00.100

## 23. Find the airlines with the highest number of flights operated from a specific airport.









```
SELECT A.Airline_Name, COUNT(F.Flight_No) AS Num_Flights FROM Airlines AS A
INNER JOIN Flight AS F ON A.Airline_Name = F.Airline_Name
WHERE F.Departure_Airport_Code = 'MAA'
GROUP BY A.Airline_Name
ORDER BY Num_Flights DESC
```

LIMIT 1;

Data Output Messages Notifications		
		
		
		
airline_name	num_flights	
[PK] character varying	bigint	
1	ALASKA	
	3	

**24. Find the total revenue generated from ticket sales for flights operated by each airline.**

```
SELECT A.Airline_Name, SUM(T.Price) AS Total_Revenue
FROM Airlines AS A
INNER JOIN Flight AS F ON A.Airline_Name = F.Airline_Name
INNER JOIN Ticket AS T ON F.Flight_No = T.Flight_No
GROUP BY A.Airline_Name;
```

Data Output Messages Notifications		
		
		
		
airline_name	total_revenue	
[PK] character varying	numeric	
1	ALASKA	
	5600.00	
2	SPICEJET	
	6600.00	
3	AIRINDIA	
	8100.00	
4	INDIGO	
	7800.00	
5	Qatar Airways	
	11200.00	
6	Emirates	
	8800.00	
7	SWISS Airways	
	5000.00	

Total rows: 7 of 7    Query complete 00:00:00.098

**25. Find the number of flights departing from each airport along with the average capacity of those flights.**

```
SELECT F.Departure_Airport_Code, COUNT(F.Flight_No) AS Num_Flights,
CAST(AVG(F.Capacity) AS INT) AS Avg_Capacity
FROM Flight AS F
```

GROUP BY F.Departure\_Airport\_Code;

Data Output Messages Notifications			
	departure_airport_code character varying	num_flights bigint	avg_capacity integer
1	JAI	2	185
2	MAA	7	173
3	JFK	2	160
4	LCY	1	150
5	FRA	1	190
6	DEL	6	177
7	AMD	5	172
8	BOM	7	175

Total rows: 8 of 8 Query complete 00:00:00.089

**26. List all flights where the departure gate is the same as the arrival gate.**

```
SELECT f.Flight_No, f.Departure_Gate_No, f.Arrival_Gate_No
FROM Flight f
WHERE f.Departure_Gate_No = f.Arrival_Gate_No;
```

	flight_no [PK] character varying	departure_gate_no integer	arrival_gate_no integer
1	AI538	4	4
2	QP1346	2	2
3	SG8158	1	1
4	BR123	1	1











**27. Retrieve the names of passengers who have not checked in for their flights.**

```
SELECT P.Name,P.pid
FROM Passenger P
LEFT JOIN Boarding_Pass B ON P.PID = B.PID
WHERE B.ID IS NULL;
```

	name character varying (30) 	pid [PK] character varying 
1	Bansi Patel	P024
2	Sania Patel	P023
3	Meghavi Gohil	P022
4	Nipurna Patel	P021

## 28. Find the busiest days for flight departures from each airport.

```
SELECT F.Departure_Airport_Code, DATE(F.Departure_Time) AS Departure_Date,
COUNT(F.Flight_No) AS Num_Flights
FROM Flight AS F
GROUP BY F.Departure_Airport_Code, Departure_Date
ORDER BY Num_Flights DESC;
```

Data Output Messages Notifications			
			
			
	departure_airport_code character varying 	departure_date date 	num_flights bigint 
1	BOM	2024-06-08	3
2	AMD	2024-05-04	2
3	MAA	2024-05-01	2
4	DEL	2024-07-17	2
5	MAA	2024-07-17	1
6	BOM	2024-06-05	1
7	MAA	2024-07-03	1
8	JFK	2024-06-15	1
9	FRA	2024-06-13	1
Total rows: 26 of 26		Query complete 00:00:00.086	

## 29. Retrieve the total revenue generated from ticket sales for each month of the year.

```
SELECT EXTRACT(MONTH FROM T.Date_Of_Issue) AS Month, SUM(T.Price) AS
Monthly_Revenue
FROM Ticket AS T
INNER JOIN Transaction AS Tr ON T.TransactionID = Tr.TransactionID
GROUP BY EXTRACT(MONTH FROM T.Date_Of_Issue);
```

Data Output	Messages	Notifications
<div> <div>+</div> <div>📄</div> <div>▼</div> <div>📋</div> <div>▼</div> <div>🗑️</div> <div>📊</div> <div>⬇️</div> <div>📈</div> </div>		
	month double precision	monthly_revenue numeric
1	3	13400.00
2	4	39700.00

**30. Retrieve the name , department , airline name of the employee with the highest salary.**

```
SELECT Name,DeptNo,Airline_name,Salary
FROM Employee
ORDER BY Salary DESC
LIMIT 1;
```

	name character varying (30)	deptno character varying (5)	airline_name character varying	salary integer
1	Chirag Patel	DEP06	AIRINDIA	95000

**31. Display the oldest employee.**

```
SELECT *,
       DATE_PART('year', AGE(CURRENT_DATE, DOB)) AS Age
FROM Employee
ORDER BY AGE(CURRENT_DATE, DOB) DESC
LIMIT 1;
```

Data Output

Messages

Notifications

+

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⬇️

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	emp_id [PK] character varying 🔍	name character varying (30) 🔍	dob date 🔍	salary integer 🔍	gender character 🔍	airline_name character varying 🔍	deptno character varying (5) 🔍	airport_code character varying 🔍	age double precision 🔒
1	E220	Ajay Saxena	1980-05-20	95000	M	INDIGO	DEP02	DEL	43

**32. What is the highest priced ticket sold?**

```
SELECT flight_no,airline_name, max(Price) AS Sales FROM Ticket natural join flight
GROUP BY Flight_No,ticket.price,airline_name
ORDER BY ticket.price DESC LIMIT 1;
```



	flight_no character varying	airline_name character varying	sales numeric
1	EK509	Emirates	3000.00

### 33. List of all employees of a given airline name.

```
SELECT * FROM Employee
WHERE Airline_Name= 'Emirates';
```

Data Output Messages Notifications								
	emp_id [PK] character varying	name character varying (30)	dob date	salary integer	gender character	airline_name character varying	deptno character varying (5)	airport_code character varying
1	E130	Amey Iyer	1995-09-25	45000	M	Emirates	DEP01	MAA
2	E131	Shubham Sheth	1993-08-24	45000	M	Emirates	DEP02	MAA
3	E132	Tanmay Sharma	1995-02-11	45000	M	Emirates	DEP03	MAA
4	E133	Dhairya Jha	1995-04-12	45000	M	Emirates	DEP04	MAA
5	E134	Jinal Joshi	1996-07-14	45000	F	Emirates	DEP05	MAA
6	E165	Vatsal Thakkar	1993-12-24	70000	M	Emirates	DEP03	LCY
7	E171	Anushka Patel	1993-11-25	55000	F	Emirates	DEP03	JFK
8	E172	Punam Kumar	1992-06-29	70000	M	Emirates	DEP02	JFK
9	E182	Aryan Singh	1998-09-03	58000	M	Emirates	DEP02	DEL
Total rows: 13 of 13 Query complete 00:00:00.089								

### 34. What are the top three airlines based on the total revenue generated from ticket sales across all flights?

```
SELECT a.Airline_Name, SUM(t.Price) AS Total_Revenue
FROM Airlines a
JOIN Flight f ON a.Airline_Name = f.Airline_Name
JOIN Ticket t ON f.Flight_No = t.Flight_No
GROUP BY a.Airline_Name
ORDER BY Total_Revenue DESC
LIMIT 3;
```

	airline_name [PK] character varying	total_revenue numeric
1	Qatar Airways	16800.00
2	SPICEJET	15400.00
3	INDIGO	15300.00

**35. What is the distribution of employees across departments at the airport with the airport code 'MAA'?**

```
SELECT d.Dept_Name, COUNT(e.Emp_ID) AS Total_Employees
FROM Department d
LEFT JOIN Employee e ON d.Dept_No = e.DeptNo
WHERE AIRPORT_CODE = 'MAA'
GROUP BY d.Dept_Name
ORDER BY Total_Employees DESC;
```

	dept_name character varying	total_employees bigint
1	Passenger Handling	12
2	Air Traffic Control	10
3	Flight Crew	9
4	Flight Operations	9
5	Finance and Administration	9

**36. List average ticket prices for flights operated by each airline.**



```
SELECT a.Airline_Name, CAST(AVG(t.Price) AS INT) AS Avg_Ticket_Price
FROM Airlines a
JOIN Flight f ON a.Airline_Name = f.Airline_Name
JOIN Ticket t ON f.Flight_No = t.Flight_No
GROUP BY a.Airline_Name
ORDER BY Avg_Ticket_Price DESC;
```

	airline_name [PK] character varying	avg_ticket_price integer
1	Emirates	2933
2	Qatar Airways	2800
3	ALASKA	2800
4	AIRINDIA	2700
5	INDIGO	2550
6	SWISS Airways	2500
7	SPICEJET	2200

**37. What is the total revenue generated from ticket sales for each airline operating at the airport with the airport code 'MAA'?**

```
SELECT a.Airline_Name, SUM(t.Price) AS Total_Revenue
```

```
FROM Airlines a
JOIN Flight f ON a.Airline_Name = f.Airline_Name
JOIN Ticket t ON f.Flight_No = t.Flight_No
JOIN Airport ar ON f.Departure_Airport_Code = ar.Airport_Code
WHERE ar.Airport_Code = 'MAA'
GROUP BY a.Airline_Name
ORDER BY Total_Revenue DESC;
```

airline_name [PK] character varying 	total_revenue numeric 
SPICEJET	11000.00
ALASKA	5600.00
AIRINDIA	2700.00