Day 3-SQL Server Commands

1.
```sql
SELECT
    f.flight_id AS Flight_Id,
    f.from_location AS From_Location,
    f.to_location AS To_Location,
    DATENAME(MONTH, fd.flight_departure_date) AS Month_Name,
    AVG(fd.price) AS Average_Price
FROM air_flight f
JOIN air_flight_details fd
    ON f.flight_id = fd.flight_id
WHERE f.airline_name = 'ABC Airlines'
GROUP BY
    f.flight_id,
    f.from_location,
    f.to_location,
    DATENAME(MONTH, fd.flight_departure_date),
    MONTH(fd.flight_departure_date)
ORDER BY
    f.flight_id ASC,
    MONTH(fd.flight_departure_date) ASC;
```

	Flight_Id	From_Location	To_Location	Month_Name	Average_Price
1	F101	Chennai	Hyderabad	March	4500.000000
2	F101	Chennai	Hyderabad	April	4800.000000
3	F102	Chennai	Bangalore	April	3200.000000
4	F103	Hyderabad	Mumbai	March	6500.000000
5	F104	Chennai	Hyderabad	April	5000.000000

2.
```sql
SELECT
 f.from_location,
 f.to_location,
 DATENAME(MONTH, d.flight_departure_date) AS Month_Name,
 COUNT(d.flight_departure_date) AS No_of_Services
FROM air_flight f
JOIN air_flight_details d
 ON f.flight_id = d.flight_id
GROUP BY
 f.from_location,
 f.to_location,
 DATENAME(MONTH, d.flight_departure_date),
 MONTH(d.flight_departure_date)
ORDER BY f.from_location, f.to_location, MONTH(d.flight_departure_date);
```

	from_location	to_location	Month_Name	No_of_Services
1	Chennai	Bangalore	April	1
2	Chennai	Hyderabad	March	1
3	Chennai	Hyderabad	April	2
4	Hyderabad	Mumbai	March	1

3.

```sql
SELECT
    f.from_location AS From_Location,
    f.to_location AS To_Location,
    DATENAME(MONTH, fd.flight_departure_date) AS Month_Name,
    COUNT(fd.flight_departure_date) AS No_of_Services
FROM air_flight f
JOIN air_flight_details fd
    ON f.flight_id = fd.flight_id
GROUP BY
    f.from_location,
    f.to_location,
    DATENAME(MONTH, fd.flight_departure_date),
    MONTH(fd.flight_departure_date)
ORDER BY
    f.from_location ASC,
    f.to_location ASC,
    MONTH(fd.flight_departure_date) ASC;
```

	From_Location	To_Location	Month_Name	No_of_Services
1	Chennai	Bangalore	April	1
2	Chennai	Hyderabad	March	1
3	Chennai	Hyderabad	April	2
4	Hyderabad	Mumbai	March	1

4.

```sql
SELECT
 p.profile_id,
 p.first_name,
 p.address,
 COUNT(t.ticket_id) AS No_of_Tickets
FROM air_passenger_profile p
JOIN air_ticket_info t
 ON p.profile_id = t.profile_id
GROUP BY p.profile_id, p.first_name, p.address
HAVING COUNT(t.ticket_id) = (
 SELECT MAX(cnt)
 FROM (
 SELECT COUNT(ticket_id) cnt
 FROM air_ticket_info
 GROUP BY profile_id
 ) x
)
ORDER BY p.first_name;
```

	profile_id	first_name	address	No_of_Tickets
1	P001	Arun	Chennai	3

5.

```sql
SELECT
    p.profile_id,
    p.first_name,
    p.last_name,
    t.flight_id AS Flight_Id,
    t.flight_departure_date AS Departure_Date,
    COUNT(t.ticket_id) AS No_of_Tickets
FROM air_passenger_profile p
```

```sql
        JOIN air_ticket_info t
            ON p.profile_id = t.profile_id
        JOIN air_flight f
            ON t.flight_id = f.flight_id
        WHERE
            f.from_location = 'Chennai'
            AND f.to_location = 'Hyderabad'
        GROUP BY
            p.profile_id,
            p.first_name,
            p.last_name,
            t.flight_id,
            t.flight_departure_date ORDER BY p.profile_id ASC,t.flight_id ASC,
            t.flight_departure_date ASC;
```

	profile_id	first_name	last_name	Flight_Id	Departure_Date	No_of_Tickets
1	P001	Arun	Kumar	F101	2024-03-10	1
2	P001	Arun	Kumar	F101	2024-04-10	1
3	P001	Arun	Kumar	F104	2024-04-20	1
4	P002	Bala	Krishnan	F101	2024-03-10	1
5	P003	Charan	Reddy	F104	2024-04-20	1

6.

```sql
SELECT
    f.flight_id,
    f.from_location,
    f.to_location,
    fd.price AS Ticket_Price
FROM air_flight f
JOIN air_flight_details fd
    ON f.flight_id = fd.flight_id
WHERE MONTH(fd.flight_departure_date) = 4;
```

	flight_id	from_location	to_location	Ticket_Price
1	F101	Chennai	Hyderabad	4800.00
2	F102	Chennai	Bangalore	3200.00
3	F104	Chennai	Hyderabad	5000.00

7.

```sql
SELECT
    f.flight_id,
    f.from_location,
    f.to_location,
    AVG(fd.price) AS Price
FROM air_flight f
JOIN air_flight_details fd
    ON f.flight_id = fd.flight_id
GROUP BY
    f.flight_id,
    f.from_location,
    f.to_location
ORDER BY
    f.flight_id ASC,
    f.from_location ASC,
        f.to_location ASC;
```

	flight_id	from_location	to_location	Price
1	F101	Chennai	Hyderabad	4650.000000
2	F102	Chennai	Bangalore	3200.000000
3	F103	Hyderabad	Mumbai	6500.000000
4	F104	Chennai	Hyderabad	5000.000000

8.

```sql
SELECT DISTINCT
    p.profile_id,
    CONCAT(p.first_name, ', ', p.last_name) AS customer_name,
    p.address
FROM air_passenger_profile p
JOIN air_ticket_info t
    ON p.profile_id = t.profile_id
JOIN air_flight f
    ON t.flight_id = f.flight_id
WHERE
    f.from_location = 'Chennai'
    AND f.to_location = 'Hyderabad'
ORDER BY
        p.profile_id ASC;
```

	profile_id	customer_name	address
1	P001	Arun, Kumar	Chennai
2	P002	Bala, Krishnan	Hyderabad
3	P003	Charan, Reddy	Bangalore

9.

```sql
SELECT profile_id
FROM air_ticket_info
GROUP BY profile_id
HAVING COUNT(ticket_id) = (
 SELECT MAX(cnt)
 FROM (
 SELECT COUNT(ticket_id) cnt
 FROM air_ticket_info
 GROUP BY profile_id
 ) x
)
ORDER BY profile_id;
```

	profile_id
1	P001

10.

```sql
SELECT
    f.flight_id,
    f.from_location,
    f.to_location,
    COUNT(t.ticket_id) AS No_of_Tickets
FROM air_flight f
JOIN air_ticket_info t
    ON f.flight_id = t.flight_id
WHERE
    f.airline_name = 'ABC Airlines'
GROUP BY
```

```
    f.flight_id,
    f.from_location,
    f.to_location
HAVING
    COUNT(t.ticket_id) >= 1
ORDER BY
    f.flight_id ASC;
```

	flight_id	from_location	to_location	No_of_Tickets
1	F101	Chennai	Hyderabad	3
2	F104	Chennai	Hyderabad	2