

# Practical - 3

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## AIM:

To write Selection and projection-based queries.

## QUERIES:

**1. List full details of all Route, Fares, Tariff, Aircraft, Flight, Passenger, Ticket, Itinerary.**

```
mysql> select * from aircraft;
+-----+-----+-----+
| AircraftType | ADescription      | NoOfSeats |
+-----+-----+-----+
| DC9          | Advanced Turbo Prop | 43        |
| 737          | Boeing 737-300 Jet  | 300       |
| BF6          | Airbus A330-200     | 105       |
| HS8          | Boeing 747SP        | 250       |
| WM2          | Douglas DC-9-50     | 175       |
+-----+-----+-----+
5 rows in set (0.10 sec)
```

Aircraft

```
mysql> select * from fares;
+-----+-----+
| FareType | FDescription      |
+-----+-----+
| SDR      | Standard Day Return |
| SBS      | Standby Single     |
| BUR      | Business Return    |
| SDS      | Standard Day Single |
| APX      | APEX Return        |
+-----+-----+
5 rows in set (0.04 sec)
```

Fares

```
mysql> select * from flight;
```

FlightNo	FromAirport	ToAirport	DepTime	ArrTime	AircraftType	RouteNo
BD332	Delhi	Mumbai	13:30:00	18:00:00	DC9	3
BD125	Kolkata	Goa	10:00:00	13:50:00	737	4
BD412	Pune	Delhi	17:00:00	20:30:00	BF6	6
BD54	Indore	Kolkata	14:00:00	17:20:00	DC9	8
BD582	Mumbai	Goa	09:00:00	11:10:00	HS8	7
BD556	Kolkata	Goa	20:10:00	22:40:00	BF6	4
BD80	Delhi	Mumbai	15:20:00	19:15:00	WM2	3

```
7 rows in set (0.00 sec)
```

Flight

```
mysql> select * from itinerary;
```

TicketNo	FlightNo	LegNo	FlightDate	FareType
TN543	BD332	2	2021-03-14	SDS
TN719	BD412	4	2021-04-22	BUR
TN678	BD125	1	2021-02-17	SDR
TN596	BD54	4	2021-03-08	SDS
TN607	BD582	3	2021-04-18	SDR
TN590	BD556	1	2021-03-30	SBS
TN726	BD80	2	2021-02-14	BUR
TN668	BD332	2	2021-04-22	APX
TN623	BD125	3	2021-02-25	SBS
TN568	BD556	4	2021-04-22	APX
TN719	BD582	1	2021-04-22	BUR
TN607	BD412	3	2021-04-18	SBS

```
12 rows in set (0.07 sec)
```

Itinerary

```
mysql> select * from route;
```

RouteNo	RDescription
3	Delhi-Mumbai
4	Kolkata-Goa
5	Chandigarh-Chennai
6	Pune-Delhi
7	Mumbai-Goa
8	Indore-Kolkata
9	Patna-Raipur
10	Chennai-Pune

```
8 rows in set (0.04 sec)
```

Route

```
mysql> select * from tariff;
```

RouteNo	FareType	price
3	BUR	117
3	SDR	158
3	SDS	79
4	SDR	162
4	SBS	49
6	BUR	117
6	SBS	42
6	KFS	53
7	SDR	128
8	SDS	74

```
10 rows in set (0.16 sec)
```

Tariff

```
mysql> select * from passenger;
```

Pid	Name	Address	TelNo
28	Aiman Siddiqua	Kidwai Nagar	9182837465
36	Aksht Jain	Gohana	9175392658
23	Ritwik Arora	Rohini	9184628193
31	Samriddhi Banara	Dwarka	9492719371
39	Anirudh Awasthi	Rajouri Garden	9184628681
32	Ifra Siddiqua	Kidwai Nagar	9181736712
25	Apoorva Srivastav	Ghaziabad	9491746217
37	Amogh Diwan	Gurgaon	9138481938

```
8 rows in set (0.12 sec)
```

Passenger

```
mysql> select * from ticket;
+-----+-----+-----+
| TicketNo | TicketDate | Pid |
+-----+-----+-----+
| TN678    | 2021-02-17 | 25  |
| TN543    | 2021-03-14 | 39  |
| TN623    | 2021-02-26 | 36  |
| TN596    | 2021-03-08 | 28  |
| TN719    | 2021-04-22 | 37  |
| TN590    | 2021-03-30 | 32  |
| TN726    | 2021-02-14 | 23  |
| TN607    | 2021-04-18 | 31  |
| TN568    | 2021-03-14 | 39  |
| TN668    | 2021-04-22 | 37  |
+-----+-----+-----+
10 rows in set (0.14 sec)
```

Ticket

## 2. List the Names and Addresses of all Passengers.

```
mysql> select Name, Address
-> from passenger;
+-----+-----+
| Name          | Address          |
+-----+-----+
| Aiman Siddiqua | Kidwai Nagar    |
| Aksht Jain     | Gohana          |
| Ritwik Arora   | Rohini          |
| Samriddhi Banara | Dwarka          |
| Anirudh Awasthi | Rajouri Garden  |
| Ifra Siddiqua  | Kidwai Nagar    |
| Apoorva Srivastav | Ghaziabad       |
| Amogh Diwan    | Gurgaon         |
+-----+-----+
8 rows in set (0.00 sec)
```

## 3. List all Flight No's with tickets issued against them (Hint - Flights with issued tickets are recorded in the Itinerary table).

```
mysql> select distinct FlightNo from itinerary;
+-----+
| FlightNo |
+-----+
| BD332    |
| BD556    |
| BD54     |
| BD412    |
| BD582    |
| BD125    |
| BD80     |
+-----+
7 rows in set (0.13 sec)
```

#### 4. List the description of all Routes using Delhi.

```
mysql> select *
-> from route
-> where RDescription like '%Delhi%';
+-----+-----+
| RouteNo | RDescription |
+-----+-----+
|      3 | Delhi-Mumbai |
|      6 | Pune-Delhi   |
+-----+-----+
2 rows in set (0.58 sec)
```

#### 5. Find the telephone numbers of all passengers with a surname of either 'Siddiqua' or 'Arora'.

```
mysql> select Name, TelNo
-> from passenger
-> where Name like '%Siddiqua%' OR Name like '%Arora%';
+-----+-----+
| Name          | TelNo       |
+-----+-----+
| Aiman Siddiqua | 9182837465 |
| Ritwik Arora   | 9184628193 |
| Ifra Siddiqua  | 9181736712 |
+-----+-----+
3 rows in set (0.00 sec)
```

#### 6. List the names and addresses of passengers with Pid's in the range 25 to 35 inclusive

```
mysql> Select Name, Address
-> from passenger
-> where Pid>=25 AND Pid<=35;
+-----+-----+
| Name          | Address     |
+-----+-----+
| Apoorva Srivastav | Ghaziabad  |
| Aiman Siddiqua   | Kidwai Nagar |
| Samriddhi Banara  | Dwarka     |
| Ifra Siddiqua    | Kidwai Nagar |
+-----+-----+
4 rows in set (0.11 sec)
```

**7. Find the Tickets (No's) issued on Flights BD54, BD80, BD412, BD582, or BD332**

```
mysql> Select TicketNo, FlightNo
-> from itinerary
-> where FlightNo IN ('BD80', 'BD54', 'BD412', 'BD582', 'BD332');
+-----+-----+
| TicketNo | FlightNo |
+-----+-----+
| TN543    | BD332    |
| TN596    | BD54     |
| TN607    | BD412    |
| TN607    | BD582    |
| TN668    | BD332    |
| TN719    | BD412    |
| TN719    | BD582    |
| TN726    | BD80     |
+-----+-----+
8 rows in set (0.05 sec)
```

**8. List the names and addresses of passengers who either have Pid's in the range 25 to 35 inclusive or have a surname of 'Jain'.**

```
mysql> Select Name, Address
-> from passenger
-> where (Pid>=25 AND Pid<=35) OR Name like '%Jain%';
+-----+-----+
| Name          | Address    |
+-----+-----+
| Aiman Siddiqua | Kidwai Nagar |
| Aksht Jain     | Gohana     |
| Samriddhi Banara | Dwarka     |
| Ifra Siddiqua  | Kidwai Nagar |
| Apoorva Srivastav | Ghaziabad  |
+-----+-----+
5 rows in set (0.00 sec)
```

**9. List full details of all flights from Delhi or Indore where the allocated aircraft is a DC9.**

```
mysql> Select *
-> from flight
-> where (FromAirport = 'Delhi' OR FromAirport = 'Indore') AND AircraftType = 'DC9';
+-----+-----+-----+-----+-----+-----+-----+
| FlightNo | FromAirport | ToAirport | DepTime | ArrTime | AircraftType | RouteNo |
+-----+-----+-----+-----+-----+-----+-----+
| BD332    | Delhi       | Mumbai   | 13:30   | 18:00   | DC9          | 3        |
| BD54     | Indore      | Kolkata   | 14:00   | 17:20   | DC9          | 8        |
+-----+-----+-----+-----+-----+-----+-----+
2 rows in set (0.61 sec)
```

## 10. List details of aircraft with seat capacities between 40 and 120.

```
mysql> Select *
      -> from aircraft
      -> where NoOfSeats >= 40 AND NoOfSeats <=120;
+-----+-----+-----+
| AircraftType | ADescription          | NoOfSeats |
+-----+-----+-----+
| DC9          | Advanced Turbo Prop   | 43        |
| BF6          | Airbus A330-200       | 105       |
+-----+-----+-----+
2 rows in set (0.00 sec)
```

## 11. List the FlightNo's and Aircraft Type of flights from Delhi to Mumbai with departure times after 07:00 and before 15:00.

```
mysql> Select FlightNo, AircraftType
      -> from flight
      -> where FromAirport = 'Delhi' AND ToAirport = 'Mumbai' AND DepTime >= '07:00:00' AND DepTime <= '15:00:00';
+-----+-----+
| FlightNo | AircraftType |
+-----+-----+
| BD332    | DC9          |
+-----+-----+
1 row in set (0.00 sec)
```