PRACTICAL – 10

AIMAN SIDDIQUA 2K18/MC/008

**QUERIES:**

1. **List the description of the aircraft with the largest seating capacity.**

mysql> **SELECT** ADescription

-> **FROM** Aircraft

-> **WHERE** NoOfSeats = (**SELECT** **MAX**(NoOfSeats) **FROM** Aircraft);

+--------------------+

| ADescription |

+--------------------+

| Boeing **737**-**300** Jet |

+--------------------+

1. row **in** **set** (**0**.**10** sec)
2. **List all aircraft that are not allocated to any timetabled Flights.**

mysql> **SELECT** \*

-> **FROM** Aircraft

-> **WHERE** AircraftType **NOT** **IN** (**SELECT** **DISTINCT** AircraftType **FROM** Flight);

+--------------+-------------------+-----------+

| AircraftType | ADescription | NoOfSeats |

+--------------+-------------------+-----------+

| F24 | Fokker-Friendship | **48** |

+--------------+-------------------+-----------+

1. row **in** **set** (**0**.**34** sec)
2. **By use of the IN operator and a sub-query list the names and addresses of passengers with tickets for flight BD80.**

mysql> **SELECT** Name, Address

-> **FROM** Passenger

-> **WHERE** Pid **IN**

-> (**SELECT** Pid **FROM** Ticket T, Itinerary I

-> **WHERE** T.TicketNo = I.TicketNo

-> **AND** I.FlightNo = 'BD80');

+-------------------+-----------+

| Name | Address |

+-------------------+-----------+

| Apoorva Srivastav | Ghaziabad |

| Ritwik Arora | Rohini |

+-------------------+-----------+

1. rows **in** **set** (**0**.**17** sec)
2. **List the names and addresses of passengers with Standby Single (SBS) or Standard Return (SDR) tickets for flight BD54.**

mysql> **SELECT** Name, Address

-> **FROM** Passenger

-> **WHERE** Pid **IN**

-> (**SELECT** Pid

-> **FROM** Ticket T, Itinerary I

-> **WHERE** T.TicketNo = I.TicketNo

-> **AND** I.FlightNo = 'BD54'

-> **AND** I.FareType **IN** ('SBS', 'SDR'));

+----------------+--------------+

| Name | Address |

+----------------+--------------+

| Aiman Siddiqua | Kidwai Nagar |

+----------------+--------------+

1. row **in** **set** (**0**.**10** sec)
2. **Provide an alternative to the SQL used in query 2.**

mysql> **SELECT** A.AircraftType

-> **FROM** Aircraft A

-> **LEFT** **JOIN** Flight F **ON** A.AircraftType = F.AircraftType

-> **WHERE** F.AircraftType **IS** **NULL**;

+--------------+

| AircraftType |

+--------------+

| F24 |

+--------------+

**1** row **in** **set** (**0**.**02** sec)

1. **Find the AircraftType with the smallest seating capacity:**

* **using an appropriate aggregate function;**

mysql> **SELECT** AircraftType

-> **FROM** Aircraft

-> **WHERE** NoOfSeats **IN** (**SELECT** **MIN**(NoOfSeats) **FROM** Aircraft);

+--------------+

| AircraftType |

+--------------+

| DC9 |

+--------------+

**1** row **in** **set** (**0**.**00** sec)

* **without using an aggregate function.**

mysql> **SELECT** AircraftType

-> **FROM** Aircraft A1

-> **WHERE** NoOfSeats < **ALL** (**SELECT** A2.NoOfSeats **FROM** Aircraft A2 **WHERE** A1.NoOfSeats<> A2.NoOfSeats);

+--------------+

| AircraftType |

+--------------+

| DC9 |

+--------------+

**1** row **in** **set** (**0**.**00** sec)

1. **List the names and addresses of passengers with tickets made up of itineraries with only one flight.**

mysql> **SELECT** Name, Address

-> **FROM** Passenger

-> **WHERE** Pid **IN**

-> (**SELECT** T.Pid

-> **FROM** Ticket T, Itinerary I

-> **WHERE** T.TicketNo = I.TicketNo

-> **GROUP** **BY** I.TicketNo

-> **HAVING** **COUNT**(I.FlightNo) = **1**);

+-------------------+-----------+

| Name | Address |

+-------------------+-----------+

| Ritwik Arora | Rohini |

| Apoorva Srivastav | Ghaziabad |

| Aksht Jain | Gohana |

+-------------------+-----------+

**3** rows **in** **set** (**0**.**10** sec)

1. **List the names and addresses of passengers who purchased their Tickets on 18-Apr-2021.**

mysql> **SELECT** Name, Address

-> **FROM** Passenger P, Ticket T

-> **WHERE** P.Pid = T.Pid

-> **AND** T.TicketDate = '2021-04-18';

+------------------+---------+

| Name | Address |

+------------------+---------+

| Samriddhi Banara | Dwarka |

+------------------+---------+

**1** row **in** **set** (**0**.**00** sec)