**Displaying all record of table pdetails:**

**mysql> select \* from pdetails;**

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

| Id | First\_name | Last\_name | Gender | passport\_no | Total\_fare |

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

| 101 | Ritu | Jha | F | 2047541 | 3000 |

| 102 | Priya | Kumari | F | 1037552 | 8000 |

| 103 | Diya | Sharma | F | 5238722 | 9500 |

| 104 | Prajwal | Verma | M | 7838721 | 10000 |

| 105 | Riya | Verma | F | 9812721 | 15000 |

| 106 | Piya | Sharma | F | 2273422 | 21000 |

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

**1.Filtering Data using ‘where’ to list all records with Total fare less than 10000:**

**mysql> select \* from pdetails where Total\_fare < 10000;**

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

| Id | First\_name | Last\_name | Gender | passport\_no | Total\_fare |

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

| 101 | Ritu | Jha | F | 2047541 | 3000 |

| 102 | Priya | Kumari | F | 1037552 | 8000 |

| 103 | Diya | Sharma | F | 5238722 | 9500 |

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

**2.Displaying minimum Total fare among all:**

**mysql> select min(Total\_fare) from pdetails;**

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

| min(Total\_fare) |

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

| 3000 |

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

**3.Displaying all records with First name ending with ‘iya’:**

**mysql> select \* from pdetails where First\_name like '%iya';**

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

| Id | First\_name | Last\_name | Gender | passport\_no | Total\_fare |

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

| 102 | Priya | Kumari | F | 1037552 | 8000 |

| 103 | Diya | Sharma | F | 5238722 | 9500 |

| 105 | Riya | Verma | F | 9812721 | 15000 |

| 106 | Piya | Sharma | F | 2273422 | 21000 |

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

**4.Updating the table to set Total fare as ‘2000’ wherever Gender is ‘M’:**

**mysql> select \* from pdetails;** *//TABLE BEFORE UPDATION*

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

| Id | First\_name | Last\_name | Gender | passport\_no | Total\_fare |

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

| 101 | Ritu | Jha | F | 2047541 | 3000 |

| 102 | Priya | Kumari | F | 1037552 | 8000 |

| 103 | Diya | Sharma | F | 5238722 | 9500 |

| 104 | Prajwal | Verma | M | 7838721 | 5000 |

| 105 | Riya | Verma | F | 9812721 | 15000 |

| 106 | Piya | Sharma | F | 2273422 | 21000 |

| 107 | Rahul | Yadav | M | 1234235 | 14000 |

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

**mysql> update pdetails set Total\_fare = 2000 where Gender = 'M';**

Query OK, 2 rows affected (0.09 sec)

mysql> select \* from pdetails; *//TABLE AFTER UPDATION*

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

| Id | First\_name | Last\_name | Gender | passport\_no | Total\_fare |

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

| 101 | Ritu | Jha | F | 2047541 | 3000 |

| 102 | Priya | Kumari | F | 1037552 | 8000 |

| 103 | Diya | Sharma | F | 5238722 | 9500 |

| 104 | Prajwal | Verma | M | 7838721 | 2000 |

| 105 | Riya | Verma | F | 9812721 | 15000 |

| 106 | Piya | Sharma | F | 2273422 | 21000 |

| 107 | Rahul | Yadav | M | 1234235 | 2000 |

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

**5.Deleting the records where Gender is ‘M’:**

**mysql> select \* from pdetails;** *//TABLE BEFORE DELETION*

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

| Id | First\_name | Last\_name | Gender | passport\_no | Total\_fare |

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

| 101 | Ritu | Jha | F | 2047541 | 3000 |

| 102 | Priya | Kumari | F | 1037552 | 4500 |

| 103 | Diya | Sharma | F | 5238722 | 4500 |

| 104 | Prajwal | Verma | M | 7838721 | 2000 |

| 105 | Riya | Verma | F | 9812721 | 4500 |

| 106 | Piya | Sharma | F | 2273422 | 4500 |

| 107 | Rahul | Yadav | M | 1234235 | 2000 |

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

**mysql> delete from pdetails where Gender = 'M';**

Query OK, 2 rows affected (0.18 sec)

**mysql> select \* from pdetails;** *//TABLE AFTER DELETION*

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

| Id | First\_name | Last\_name | Gender | passport\_no | Total\_fare |

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

| 101 | Ritu | Jha | F | 2047541 | 3000 |

| 102 | Priya | Kumari | F | 1037552 | 4500 |

| 103 | Diya | Sharma | F | 5238722 | 4500 |

| 105 | Riya | Verma | F | 9812721 | 4500 |

| 106 | Piya | Sharma | F | 2273422 | 4500 |

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

**6.Natural Join to join the table ‘passenger’ and ‘food’ using the common field ‘passport\_no’:** (shows only the records with common passport\_no in both the tables)

**mysql> select \* from passenger;**

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

| passport\_no | Name               | Age  | Air\_class |

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

|         101 | Katherine Langford |   26 | Business  |

|         102 | Camilla Cabello    |   30 | First     |

|         103 | Elena Gilbert      |   18 | Business  |

|         104 | Stefan Salvatore   |   20 | First     |

|         105 | Damon Salvatore    |   22 | Economy   |

|         106 | Caroline Forbes    |   17 | First     |

|         107 | Katherine Pierce   |   25 | Business  |

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

**mysql> select \* from food;**

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

| passport\_no | Food\_item        | seat\_no | Food\_price |

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

| 102         | Mexican Sandwich | 17A     |        200 |

| 104         | Cold Coffee      | 19B     |        150 |

| 107         | Chicken Burger   | 8A      |        300 |

| 110         | Cheese Pizza     | 20C     |        400 |

| 105         | Veg Bun          | 2C      |        150 |

| 108         | Egg Puff         | 7B      |        100 |

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

**mysql> select \* from passenger NATURAL JOIN food;**

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

| passport\_no | Name             | Age  | Air\_class | Food\_item        | seat\_no | Food\_price |

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

|         102 | Camilla Cabello  |   30 | First     | Mexican Sandwich | 17A     |        200 |

|         104 | Stefan Salvatore |   20 | First     | Cold Coffee      | 19B     |        150 |

|         105 | Damon Salvatore  |   22 | Economy   | Veg Bun          | 2C      |        150 |

|         107 | Katherine Pierce |   25 | Business  | Chicken Burger   | 8A      |        300 |

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

**7.Left Join to join the table ‘passenger’ and ‘food’ using the fields ‘passport\_no’ in ‘passenger’ and ‘pno’ in ‘food’:**

(shows all the records of the left table joined with values of the right table and wherever the values are not present in the right table, it shows ‘null’)

**mysql> select \* from passenger;**

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

| passport\_no | Name               | Age  | Air\_class |

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

|         101 | Katherine Langford |   26 | Business  |

|         102 | Camilla Cabello    |   30 | First     |

|         103 | Elena Gilbert      |   18 | Business  |

|         104 | Stefan Salvatore   |   20 | First     |

|         105 | Damon Salvatore    |   22 | Economy   |

|         106 | Caroline Forbes    |   17 | First     |

|         107 | Katherine Pierce   |   25 | Business  |

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

**mysql> select \* from food;**

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

| pno | Food\_item        | seat\_no | Food\_price |

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

| 102         | Mexican Sandwich | 17A     |        200 |

| 104         | Cold Coffee      | 19B     |        150 |

| 107         | Chicken Burger   | 8A      |        300 |

| 110         | Cheese Pizza     | 20C     |        400 |

| 105         | Veg Bun          | 2C      |        150 |

| 108         | Egg Puff         | 7B      |        100 |

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

**mysql> select \* from passenger LEFT OUTER JOIN food on passenger.passport\_no = food.pno;**

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

| passport\_no | Name               | Age  | Air\_class | pno  | Food\_item        | seat\_no | Food\_price |

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

|         101 | Katherine Langford |   26 | Business  | NULL | NULL             | NULL    |       NULL |

|         102 | Camilla Cabello    |   30 | First     | 102  | Mexican Sandwich | 17A     |        200 |

|         103 | Elena Gilbert      |   18 | Business  | NULL | NULL             | NULL    |       NULL |

|         104 | Stefan Salvatore   |   20 | First     | 104  | Cold Coffee      | 19B     |        150 |

|         105 | Damon Salvatore    |   22 | Economy   | 105  | Veg Bun          | 2C      |        150 |

|         106 | Caroline Forbes    |   17 | First     | NULL | NULL             | NULL    |       NULL |

|         107 | Katherine Pierce   |   25 | Business  | 107  | Chicken Burger   | 8A      |        300 |

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

**8.Right Join to join the table ‘passenger’ and ‘food’ using the fields ‘passport\_no’ in ‘passenger’ and ‘pno’ in ‘food’:**

(shows all the records of the right table joined with values of the left table and wherever the values are not present in the left table, it shows ‘null’)

mysql> select \* from passenger **RIGHT OUTER JOIN** food on **passenger.passport\_no = food.pno**;

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

| Passport\_no | Name             | Age  | Air\_class | pno  | Food\_item        | seat\_no | Food\_price |

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

|         102 | Camilla Cabello  |   30 | First     | 102  | Mexican Sandwich | 17A     |        200 |

|         104 | Stefan Salvatore |   20 | First     | 104  | Cold Coffee      | 19B     |        150 |

|         107 | Katherine Pierce |   25 | Business  | 107  | Chicken Burger   | 8A      |        300 |

|        NULL | NULL             | NULL | NULL      | 110  | Cheese Pizza     | 20C     |        400 |

|         105 | Damon Salvatore  |   22 | Economy   | 105  | Veg Bun          | 2C      |        150 |

|        NULL | NULL             | NULL | NULL      | 108  | Egg Puff         | 7B      |        100 |

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

**9.Self Join to join the table ‘pilot’ with itself using the fields ‘pilot\_id’ and ‘pilot\_age’ :**

(shows all the records of the table where the ‘pilot\_id’ is present in the ‘pilot\_age’ field)

mysql> select \* from pilot;

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

| Pilot\_id | Pilot\_Name      | Pilot\_Age | Pilot\_Designation    | Aircraft |

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

|       20 | Sharika Tasneem |        19 | Captain              | A320     |

|       21 | Aisha Aziz      |        27 | Captain              | B737     |

|       22 | Sara Khan       |        18 | Junior First Officer | B727     |

|       23 | Riya Sharma     |        23 | Senior First Officer | B717     |

|       24 | Clay Jensen     |        21 | Junior First Officer | A300     |

|       25 | Shreya Verma    |        26 | Captain              | A321     |

|       26 | Maeve Wiley     |        35 | Captain              | A330     |

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

mysql> select p1.Pilot\_id, p1.Pilot\_name, p1.Pilot\_age, p1.aircraft from pilot p1, pilot p2 where **p1.Pilot\_id = p2.Pilot\_age;**

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

| Pilot\_id | Pilot\_name  | Pilot\_age | aircraft |

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

|       23 | Riya Sharma |        23 | B717     |

|       21 | Aisha Aziz  |        27 | B737     |

|       26 | Maeve Wiley |        35 | A330     |

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**10.Inner Join to join the table ‘passenger’ with table ‘food’ using the fields ‘passport\_no’ in passenger table and ‘pno’ in food table :**

(shows only the records where passport\_no in passenger table is same as pno in food table)

mysql> select \* from passenger **INNER JOIN** food on **passenger.passport\_no = food.pno**;

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

| Passport\_no | Name             | Age  | Air\_class | pno  | Food\_item        | seat\_no | Food\_price |

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

|         102 | Camilla Cabello  |   30 | First     | 102  | Mexican Sandwich | 17A     |        200 |

|         104 | Stefan Salvatore |   20 | First     | 104  | Cold Coffee      | 19B     |        150 |

|         105 | Damon Salvatore  |   22 | Economy   | 105  | Veg Bun          | 2C      |        150 |

|         107 | Katherine Pierce |   25 | Business  | 107  | Chicken Burger   | 8A      |        300 |

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