(base) pratt3000@pratts-laptop  ~  mysql -u root -p

Enter password:

Welcome to the MySQL monitor. Commands end with ; or \g.

Your MySQL connection id is 9

Server version: 8.0.21-0ubuntu0.20.04.4 (Ubuntu)

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owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql> use A1\_professor\_schema

Reading table information for completion of table and column names

You can turn off this feature to get a quicker startup with -A

Database changed

mysql> #1. Find the professor details and department details using NATURAL JOIN.

mysql> select \* from professor natural join department;

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

| dept\_id | prof\_id | fname | lname | designation | salary | dob | email | phone | city | dept\_name |

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

| 1 | 1 | Sarang | Joshi | Professor | 100000 | 1976-02-12 | sajoshi@pict.edu | 3244334321 | Nashik | COMP |

| 1 | 2 | Rajesh | Ingle | Professor | 50000 | 1970-08-21 | ringle@pict.edu | 1814223456 | Pune | COMP |

| 1 | 3 | Girish | Potdar | Associate Professor | 40000 | 1974-09-16 | gpotdar@pict.edu | 7678223314 | Pune | COMP |

| 1 | 8 | Pralhad | kulkarni | Assistant Professor | 90000 | 2015-01-01 | pralhadk@pict.edu | 9814224252 | pune | COMP |

| 2 | 4 | Khatri | Indraraj | Associate Professor | 30000 | 1985-01-01 | khatri@pict.edu | 9999923231 | Pune | IT |

| 2 | 7 | dinesh | mehta | Assistant Professor | 15000 | 2016-01-01 | ronakm@pict.edu | 9814224252 | mumbai | IT |

| 2 | 9 | shushil | Chandak | Professor | 90000 | 1987-02-23 | chandak@pict.edu | 9814224322 | aurangabad | IT |

| 3 | 5 | Sunil | parasnese | Professor | 15000 | 1971-02-23 | sunilpp@pict.edu | 1814223252 | mumbai | ENTC |

| 3 | 6 | arun | joshi | Assistant Professor | 120000 | 1961-02-23 | rrk@pict.edu | 1814224252 | aurangabad | ENTC |

| 3 | 10 | Prashant | rathod | Professor | 45000 | 1970-02-23 | prashant@pict.edu | 1814223452 | mumbai | ENTC |

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

10 rows in set (0.00 sec)

mysql> #2. Find the prof\_id, prof\_name and shift.

mysql> select professor.prof\_id, fname, lname, shift from professor join shift using(prof\_id);

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

| prof\_id | fname | lname | shift |

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

| 6 | arun | joshi | 2 |

| 7 | dinesh | mehta | 1 |

| 3 | Girish | Potdar | 1 |

| 4 | Khatri | Indraraj | 2 |

| 8 | Pralhad | kulkarni | 1 |

| 10 | Prashant | rathod | 1 |

| 2 | Rajesh | Ingle | 2 |

| 1 | Sarang | Joshi | 1 |

| 9 | shushil | Chandak | 1 |

| 5 | Sunil | parasnese | 2 |

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

10 rows in set (0.01 sec)

mysql>

mysql>

mysql>

mysql>

mysql> #3. List all the department details and the corresponding names of professors in the same department.

mysql> select department.dept\_id, dept\_name, fname, lname from department left join professor on professor.dept\_id = department.dept\_id;

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

| dept\_id | dept\_name | fname | lname |

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

| 1 | COMP | Sarang | Joshi |

| 1 | COMP | Rajesh | Ingle |

| 1 | COMP | Girish | Potdar |

| 1 | COMP | Pralhad | kulkarni |

| 2 | IT | Khatri | Indraraj |

| 2 | IT | dinesh | mehta |

| 2 | IT | shushil | Chandak |

| 3 | ENTC | Sunil | parasnese |

| 3 | ENTC | arun | joshi |

| 3 | ENTC | Prashant | rathod |

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

10 rows in set (0.00 sec)

mysql>

mysql>

mysql>

mysql>

mysql>

mysql>

mysql> #4. List all the professors and the corresponding names of department.

mysql> select fname, lname, dept\_name from department right join professor on professor.dept\_id = department.dept\_id;

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

| fname | lname | dept\_name |

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

| Sarang | Joshi | COMP |

| Rajesh | Ingle | COMP |

| Girish | Potdar | COMP |

| Khatri | Indraraj | IT |

| Sunil | parasnese | ENTC |

| arun | joshi | ENTC |

| dinesh | mehta | IT |

| Pralhad | kulkarni | COMP |

| shushil | Chandak | IT |

| Prashant | rathod | ENTC |

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

10 rows in set (0.00 sec)

mysql>

mysql>

mysql>

mysql>

mysql>

mysql>

mysql>

mysql> #5. Display professor name, dept\_name, shift, salary where prof\_id = 101;

mysql> select fname, lname, dept\_name, salary, shift from professor join department using(dept\_id) join shift on professor.prof\_id = shift.prof\_id where professor.prof\_id = 1;

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

| fname | lname | dept\_name | salary | shift |

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

| Sarang | Joshi | COMP | 100000 | 1 |

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

1 row in set (0.00 sec)

mysql>

mysql>

mysql>

mysql>

mysql>

mysql> #6. list the total number of professor in each department.

mysql> select professor.dept\_id, dept\_name, count(\*) from professor left join department on professor.dept\_id = department.dept\_id group by

dept\_id;

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

| dept\_id | dept\_name | count(\*) |

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

| 1 | COMP | 4 |

| 2 | IT | 3 |

| 3 | ENTC | 3 |

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

3 rows in set (0.01 sec)

mysql> select \* from professor;

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

| prof\_id | fname | lname | dept\_id | designation | salary | dob | email | phone | city |

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

| 1 | Sarang | Joshi | 1 | Professor | 100000 | 1976-02-12 | sajoshi@pict.edu | 3244334321 | Nashik |

| 2 | Rajesh | Ingle | 1 | Professor | 50000 | 1970-08-21 | ringle@pict.edu | 1814223456 | Pune |

| 3 | Girish | Potdar | 1 | Associate Professor | 40000 | 1974-09-16 | gpotdar@pict.edu | 7678223314 | Pune |

| 4 | Khatri | Indraraj | 2 | Associate Professor | 30000 | 1985-01-01 | khatri@pict.edu | 9999923231 | Pune |

| 5 | Sunil | parasnese | 3 | Professor | 15000 | 1971-02-23 | sunilpp@pict.edu | 1814223252 | mumbai |

| 6 | arun | joshi | 3 | Assistant Professor | 120000 | 1961-02-23 | rrk@pict.edu | 1814224252 | aurangabad |

| 7 | dinesh | mehta | 2 | Assistant Professor | 15000 | 2016-01-01 | ronakm@pict.edu | 9814224252 | mumbai |

| 8 | Pralhad | kulkarni | 1 | Assistant Professor | 90000 | 2015-01-01 | pralhadk@pict.edu | 9814224252 | pune |

| 9 | shushil | Chandak | 2 | Professor | 90000 | 1987-02-23 | chandak@pict.edu | 9814224322 | aurangabad |

| 10 | Prashant | rathod | 3 | Professor | 45000 | 1970-02-23 | prashant@pict.edu | 1814223452 | mumbai |

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

10 rows in set (0.00 sec)

mysql>

mysql>

mysql>

mysql>

mysql> #7. List the prof\_id associated department and the dept\_name having name ‘computer’;

mysql> select prof\_id, fname, lname, dept\_name, department.dept\_id from professor join department using(dept\_id) where dept\_id = ( select dept\_id from department where dept\_name = 'COMP');

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

| prof\_id | fname | lname | dept\_name | dept\_id |

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

| 1 | Sarang | Joshi | COMP | 1 |

| 2 | Rajesh | Ingle | COMP | 1 |

| 3 | Girish | Potdar | COMP | 1 |

| 8 | Pralhad | kulkarni | COMP | 1 |

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

4 rows in set (0.00 sec)

mysql>

mysql>

mysql>

mysql>

mysql>

mysql>

mysql> #8. Find the names of all departments where the professors joined in year 2015 (or date of joining is 1-1-2015).

mysql> select dept\_name from department where dept\_id in(select dept\_id from professor where dob = '2015-01-01');

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

| dept\_name |

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

| COMP |

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

1 row in set (0.00 sec)

mysql>

mysql>

mysql>

mysql>

mysql>

mysql>

mysql>

mysql> #9. Create view showing the professor and shift details.

mysql> create view ProfShift as select fname, lname, shift, working\_hrs from professor join shift using(prof\_id);

Query OK, 0 rows affected (0.02 sec)

mysql> select \* from ProfShift;

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

| fname | lname | shift | working\_hrs |

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

| arun | joshi | 2 | 8-9 |

| dinesh | mehta | 1 | 8-9 |

| Girish | Potdar | 1 | 9-3 |

| Khatri | Indraraj | 2 | 9-3 |

| Pralhad | kulkarni | 1 | 9-6 |

| Prashant | rathod | 1 | 9-5 |

| Rajesh | Ingle | 2 | 9-3 |

| Sarang | Joshi | 1 | 9-3 |

| shushil | Chandak | 1 | 9-5 |

| Sunil | parasnese | 2 | 8-9 |

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

10 rows in set (0.01 sec)

mysql>

mysql>

mysql>

mysql>

mysql>

mysql>

mysql> #10. Perform Manipulation on simple view-Insert, update, delete, drop view.

mysql> create view ProfDetails as select prof\_id, fname, lname, designation from professor;

Query OK, 0 rows affected (0.01 sec)

mysql> select \* from ProfDetails;

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

| prof\_id | fname | lname | designation |

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

| 1 | Sarang | Joshi | Professor |

| 2 | Rajesh | Ingle | Professor |

| 3 | Girish | Potdar | Associate Professor |

| 4 | Khatri | Indraraj | Associate Professor |

| 5 | Sunil | parasnese | Professor |

| 6 | arun | joshi | Assistant Professor |

| 7 | dinesh | mehta | Assistant Professor |

| 8 | Pralhad | kulkarni | Assistant Professor |

| 9 | shushil | Chandak | Professor |

| 10 | Prashant | rathod | Professor |

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

10 rows in set (0.00 sec)

mysql> insert into ProfDetails values(102, 'Pranjali', 'Joshi', 'Professor');

Query OK, 1 row affected (0.01 sec)

mysql> select \* from ProfDetails;

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

| prof\_id | fname | lname | designation |

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

| 1 | Sarang | Joshi | Professor |

| 2 | Rajesh | Ingle | Professor |

| 3 | Girish | Potdar | Associate Professor |

| 4 | Khatri | Indraraj | Associate Professor |

| 5 | Sunil | parasnese | Professor |

| 6 | arun | joshi | Assistant Professor |

| 7 | dinesh | mehta | Assistant Professor |

| 8 | Pralhad | kulkarni | Assistant Professor |

| 9 | shushil | Chandak | Professor |

| 10 | Prashant | rathod | Professor |

| 102 | Pranjali | Joshi | Professor |

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

11 rows in set (0.00 sec)

mysql> update ProfDetails set designation = 'Professor' where prof\_id = 10;

Query OK, 0 rows affected (0.00 sec)

Rows matched: 1 Changed: 0 Warnings: 0

mysql> select \* from ProfDetails;

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

| prof\_id | fname | lname | designation |

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

| 1 | Sarang | Joshi | Professor |

| 2 | Rajesh | Ingle | Professor |

| 3 | Girish | Potdar | Associate Professor |

| 4 | Khatri | Indraraj | Associate Professor |

| 5 | Sunil | parasnese | Professor |

| 6 | arun | joshi | Assistant Professor |

| 7 | dinesh | mehta | Assistant Professor |

| 8 | Pralhad | kulkarni | Assistant Professor |

| 9 | shushil | Chandak | Professor |

| 10 | Prashant | rathod | Professor |

| 102 | Pranjali | Joshi | Professor |

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

11 rows in set (0.00 sec)

mysql> select \* from professor;

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

| prof\_id | fname | lname | dept\_id | designation | salary | dob | email | phone | city |

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

| 1 | Sarang | Joshi | 1 | Professor | 100000 | 1976-02-12 | sajoshi@pict.edu | 3244334321 | Nashik |

| 2 | Rajesh | Ingle | 1 | Professor | 50000 | 1970-08-21 | ringle@pict.edu | 1814223456 | Pune |

| 3 | Girish | Potdar | 1 | Associate Professor | 40000 | 1974-09-16 | gpotdar@pict.edu | 7678223314 | Pune |

| 4 | Khatri | Indraraj | 2 | Associate Professor | 30000 | 1985-01-01 | khatri@pict.edu | 9999923231 | Pune |

| 5 | Sunil | parasnese | 3 | Professor | 15000 | 1971-02-23 | sunilpp@pict.edu | 1814223252 | mumbai |

| 6 | arun | joshi | 3 | Assistant Professor | 120000 | 1961-02-23 | rrk@pict.edu | 1814224252 | aurangabad |

| 7 | dinesh | mehta | 2 | Assistant Professor | 15000 | 2016-01-01 | ronakm@pict.edu | 9814224252 | mumbai |

| 8 | Pralhad | kulkarni | 1 | Assistant Professor | 90000 | 2015-01-01 | pralhadk@pict.edu | 9814224252 | pune |

| 9 | shushil | Chandak | 2 | Professor | 90000 | 1987-02-23 | chandak@pict.edu | 9814224322 | aurangabad |

| 10 | Prashant | rathod | 3 | Professor | 45000 | 1970-02-23 | prashant@pict.edu | 1814223452 | mumbai |

| 102 | Pranjali | Joshi | NULL | Professor | NULL | NULL | NULL | NULL | NULL |

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

11 rows in set (0.00 sec)

mysql> delete from ProfDetails where prof\_id = 102;

Query OK, 1 row affected (0.01 sec)

mysql> select \* from ProfDetails;

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

| prof\_id | fname | lname | designation |

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

| 1 | Sarang | Joshi | Professor |

| 2 | Rajesh | Ingle | Professor |

| 3 | Girish | Potdar | Associate Professor |

| 4 | Khatri | Indraraj | Associate Professor |

| 5 | Sunil | parasnese | Professor |

| 6 | arun | joshi | Assistant Professor |

| 7 | dinesh | mehta | Assistant Professor |

| 8 | Pralhad | kulkarni | Assistant Professor |

| 9 | shushil | Chandak | Professor |

| 10 | Prashant | rathod | Professor |

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

10 rows in set (0.00 sec)

mysql> drop view if exists ProfDetails;

Query OK, 0 rows affected (0.02 sec)

mysql> drop view if exists ProfShift;

Query OK, 0 rows affected (0.01 sec)

mysql>