**Query 1: Find Employee details and Department details using NATURAL JOIN.**

MariaDB [te31260\_db]> select \*

-> from Employee

-> natural join Dept;

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

| Dept\_id | Emp\_id | Emp\_fname | Emp\_lname | Emp\_Position | Emp\_salary | Emp\_JoinDate | Dept\_name | Dept\_location |

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

| 1011 | 101 | Gayatri | Pillai | GM | 10000 | 2000 | Computer | Pune |

| 1011 | 102 | Hans | Mittal | VP | 110000 | 1980 | Computer | Pune |

| 1011 | 107 | Sharon | Grace | Analyst | 10000 | 2000 | Computer | Pune |

| 1011 | 108 | Soumya | Aachari | Engineer | 1000 | 2004 | Computer | Pune |

| 1012 | 103 | Parth | Joshi | VP | 100000 | 2003 | IT | Hyderabad |

| 1012 | 104 | Muskaan | Vohra | Analyst | 10000 | 2002 | IT | Hyderabad |

| 1012 | 109 | Vandana | Gupta | Engineer | 1000 | 2000 | IT | Hyderabad |

| 1013 | 105 | Keshini | Jain | GM | 10000 | 1986 | ECE | Banglore |

| 1013 | 106 | Prajwal | Padole | GM | 11000 | 1980 | ECE | Banglore |

| 1013 | 110 | Shreeya | Kalbhor | Engineer | 1000 | 2005 | ECE | Banglore |

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

10 rows in set (0.001 sec)

**Query 2: Find the emp\_fname,Emp\_position,location,Emp\_JoinDate who have the same Dept id.**

MariaDB [te31260\_db]> select e.Emp\_fname, e.Emp\_position, d.Dept\_location, e.Emp\_JoinDate from Employee e left join Dept d on e.Dept\_id = d.Dept\_id;

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

| Emp\_fname | Emp\_position | Dept\_location | Emp\_JoinDate |

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

| Gayatri | GM | Pune | 2000 |

| Hans | VP | Pune | 1980 |

| Sharon | Analyst | Pune | 2000 |

| Soumya | Engineer | Pune | 2004 |

| Parth | VP | Hyderabad | 2003 |

| Muskaan | Analyst | Hyderabad | 2002 |

| Vandana | Engineer | Hyderabad | 2000 |

| Keshini | GM | Banglore | 1986 |

| Prajwal | GM | Banglore | 1980 |

| Shreeya | Engineer | Banglore | 2005 |

| Raj | Analyst | NULL | 2010 |

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

10 rows in set (0.001 sec)

**Query 3: Find the Employee details ,Proj\_id,Project cost who does not have Project**

**location as ‘Hyderabad’.**

MariaDB [te31260\_db]> Select e.Emp\_fname, e.Emp\_lname, p.Proj\_id, p.Proj\_cost

-> from Employee e

-> join Dept d on e.Dept\_id = d.Dept\_id

-> join Project p on d.Dept\_id = p.Dept\_id

-> where p.Proj\_location <> 'Hyderabad';

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

| Emp\_fname | Emp\_lname | Proj\_id | Proj\_cost |

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

| Gayatri | Pillai | 1 | 200000 |

| Hans | Mittal | 1 | 200000 |

| Sharon | Grace | 1 | 200000 |

| Soumya | Aachari | 1 | 200000 |

| Keshini | Jain | 4 | 500000 |

| Prajwal | Padole | 4 | 500000 |

| Shreeya | Kalbhor | 4 | 500000 |

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

18 rows in set (0.001 sec)

**Query 4: Find Department Name ,employee name, Emp\_position for which project year**

**is 2020.**

MariaDB [te31260\_db]> select d.Dept\_name, e.Emp\_fname, e.Emp\_lname, e.Emp\_position

-> from Employee e

-> inner join Dept d on e.Dept\_id = d.Dept\_id

-> inner join Project p on d.Dept\_id = p.Dept\_id

-> where p.Proj\_year = 2020;

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

| Dept\_name | Emp\_fname | Emp\_lname | Emp\_position |

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

| Computer | Gayatri | Pillai | GM |

| Computer | Hans | Mittal | VP |

| Computer | Sharon | Grace | Analyst |

| Computer | Soumya | Aachari | Engineer |

| ECE | Keshini | Jain | GM |

| ECE | Prajwal | Padole | GM |

| ECE | Shreeya | Kalbhor | Engineer |

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

7 rows in set (0.032 sec)

**Query 5: Display emp\_position,D\_name who have Project cost >30000.**

MariaDB [te31260\_db]> select distinct e.Emp\_fname, e.Emp\_position, d.Dept\_name from Employee e join Dept d on e.Dept\_id = d.Dept\_id join Project p on d.Dept\_id = p.Dept\_id where p.Proj\_cost > 30000;

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

| Emp\_fname | Emp\_position | Dept\_name |

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

| Gayatri | GM | Computer |

| Hans | VP | Computer |

| Sharon | Analyst | Computer |

| Soumya | Engineer | Computer |

| Keshini | GM | ECE |

| Prajwal | GM | ECE |

| Shreeya | Engineer | ECE |

| Parth | VP | IT |

| Muskaan | Analyst | IT |

| Vandana | Engineer | IT |

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

10 rows in set (0.002 sec)

**Query 6: Find the names of all the Projects that started in the year 2015.**

MariaDB [te31260\_db]> select p.Proj\_name from Project p where p.Proj\_year = 2015;

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

| Proj\_name |

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

| ML |

| Deep Learning |

| Anomaly Detection |

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

3 rows in set (0.001 sec)

**Query 7: List the dept\_name having no\_of\_emp=4**

select d.Dept\_name from Dept d right join Employee e on d.Dept\_id = e.Dept\_id group by d.Dept\_name having count(e.Emp\_id) = 4;

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

| Dept\_name |

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

| Computer |

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

**Query 8: Display the total number of employee who have joined any project before 2009.**

MariaDB [te31260\_db]> select count(e.Emp\_id) from Employee e

-> join Project p on e.Dept\_id = p.Dept\_id

-> where p.Proj\_year < 2009;

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

| count(e.Emp\_id) |

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

| 7 |

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

1 row in set (0.001 sec)

**Query 9: Create a view showing the employee and Department details.**

MariaDB [te31260\_db]> create or replace view Emp\_view as select \* from Employee natural join Dept;

Query OK, 0 rows affected (0.025 sec)

MariaDB [te31260\_db]> select \* from Emp\_view;

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

| Dept\_id | Emp\_id | Emp\_fname | Emp\_lname | Emp\_Position | Emp\_salary | Emp\_JoinDate | Dept\_name | Dept\_location |

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

| 1011 | 101 | Gayatri | Pillai | GM | 10000 | 2000 | Computer | Pune |

| 1011 | 102 | Hans | Mittal | VP | 110000 | 1980 | Computer | Pune |

| 1011 | 107 | Sharon | Grace | Analyst | 10000 | 2000 | Computer | Pune |

| 1011 | 108 | Soumya | Aachari | Engineer | 1000 | 2004 | Computer | Pune |

| 1012 | 103 | Parth | Joshi | VP | 100000 | 2003 | IT | Hyderabad |

| 1012 | 104 | Muskaan | Vohra | Analyst | 10000 | 2002 | IT | Hyderabad |

| 1012 | 109 | Vandana | Gupta | Engineer | 1000 | 2000 | IT | Hyderabad |

| 1013 | 105 | Keshini | Jain | GM | 10000 | 1986 | ECE | Banglore |

| 1013 | 106 | Prajwal | Padole | GM | 11000 | 1980 | ECE | Banglore |

| 1013 | 110 | Shreeya | Kalbhor | Engineer | 1000 | 2005 | ECE | Banglore |

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

10 rows in set (0.002 sec)

**Query 10: Perform Manipulation on simple view-Insert, update, delete, drop view.**

MariaDB [te31260\_db]> create view EmployeeView as select Emp\_id, Emp\_fname, Emp\_lname, Emp\_position from Employee;

Query OK, 0 rows affected (0.037 sec)

MariaDB [te31260\_db]> select \* from EmployeeView;

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

| Emp\_id | Emp\_fname | Emp\_lname | Emp\_position |

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

| 101 | Gayatri | Pillai | GM |

| 102 | Hans | Mittal | VP |

| 103 | Parth | Joshi | VP |

| 104 | Muskaan | Vohra | Analyst |

| 105 | Keshini | Jain | GM |

| 106 | Prajwal | Padole | GM |

| 107 | Sharon | Grace | Analyst |

| 108 | Soumya | Aachari | Engineer |

| 109 | Vandana | Gupta | Engineer |

| 110 | Shreeya | Kalbhor | Engineer |

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

10 rows in set (0.001 sec)

MariaDB [te31260\_db]> insert into EmployeeView values(111,'Gargi','Rane','Analyst');

Query OK, 1 row affected (0.029 sec)

MariaDB [te31260\_db]> select \* from EmployeeView;

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

| Emp\_id | Emp\_fname | Emp\_lname | Emp\_position |

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

| 101 | Gayatri | Pillai | GM |

| 102 | Hans | Mittal | VP |

| 103 | Parth | Joshi | VP |

| 104 | Muskaan | Vohra | Analyst |

| 105 | Keshini | Jain | GM |

| 106 | Prajwal | Padole | GM |

| 107 | Sharon | Grace | Analyst |

| 108 | Soumya | Aachari | Engineer |

| 109 | Vandana | Gupta | Engineer |

| 110 | Shreeya | Kalbhor | Engineer |

| 111 | Gargi | Rane | Analyst |

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

11 rows in set (0.001 sec)

MariaDB [te31260\_db]> update EmployeeView set Emp\_position = 'GM' where Emp\_id = 107;

Query OK, 1 row affected (0.029 sec)

Rows matched: 1 Changed: 1 Warnings: 0

MariaDB [te31260\_db]> select \* from EmployeeView;

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

| Emp\_id | Emp\_fname | Emp\_lname | Emp\_position |

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

| 101 | Gayatri | Pillai | GM |

| 102 | Hans | Mittal | VP |

| 103 | Parth | Joshi | VP |

| 104 | Muskaan | Vohra | Analyst |

| 105 | Keshini | Jain | GM |

| 106 | Prajwal | Padole | GM |

| 107 | Sharon | Grace | GM |

| 108 | Soumya | Aachari | Engineer |

| 109 | Vandana | Gupta | Engineer |

| 110 | Shreeya | Kalbhor | Engineer |

| 111 | Gargi | Rane | Analyst |

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

11 rows in set (0.001 sec)

MariaDB [te31260\_db]> delete from EmployeeView where Emp\_id = 106;

Query OK, 1 row affected (0.058 sec)

MariaDB [te31260\_db]> select \* from EmployeeView;

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

| Emp\_id | Emp\_fname | Emp\_lname | Emp\_position |

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

| 101 | Gayatri | Pillai | GM |

| 102 | Hans | Mittal | VP |

| 103 | Parth | Joshi | VP |

| 104 | Muskaan | Vohra | Analyst |

| 105 | Keshini | Jain | GM |

| 107 | Sharon | Grace | GM |

| 108 | Soumya | Aachari | Engineer |

| 109 | Vandana | Gupta | Engineer |

| 110 | Shreeya | Kalbhor | Engineer |

| 111 | Gargi | Rane | Analyst |

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

10 rows in set (0.001 sec)

MariaDB [te31260\_db]> drop view EmployeeView;

Query OK, 0 rows affected (0.001 sec)