**Problem Statement-** Design at least 10 SQL queries for suitable database applications using SQL DML Statements: All types of joins Sub-queries and View

Mysql> create database dml;

Query OK, 1 row affected(0.00 sec)

use dml;

Database changed

mysql> Insert into Doctor2 Values(1,'Neelam',50000),(2,'Yash',25000),(3,'Pranav',20000);

Query OK, 3 rows affected (0.03 sec)

Records: 3 Duplicates: 0 Warnings: 0

mysql> Insert into Doctor2 Values(4,'Vijay',35000),(5,'Nayan',30000);

Query OK, 2 rows affected (0.00 sec)

Records: 2 Duplicates: 0 Warnings: 0

mysql> Select \* From Doctor2;

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

| id | name | salary |

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

| 1 | Neelam | 50000 |

| 2 | Yash | 25000 |

| 3 | Pranav | 20000 |

| 4 | Vijay | 35000 |

| 5 | Nayan | 30000 |

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

5 rows in set (0.00 sec)

mysql> Create table Patient(id int primary key,name varchar(25) not null,diagnosis varchar(50) not null,doctor\_id int,FOREIGN KEY(doctor\_id) REFERENCES doctor2(id));

Query OK, 0 rows affected (0.03 sec)

mysql> INSERT INTO Patient VALUES (200, 'Radhika' , 'Severe Pain in Legs' ,1);

Query OK, 1 row affected (0.01 sec)

mysql> INSERT INTO Patient VALUES (300, 'Aditi jain' , 'Mild Headaches' ,2);

Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO Patient VALUES (400, 'Snehal Soni', 'High fever' ,3);

Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO Patient VALUES (500, 'Karanveer Bohra' , 'Hand injury' ,2);

Query OK, 1 row affected (0.11 sec)

mysql> SELECT \* FROM Patient;

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

| id | name | diagnosis | doctor\_id |

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

| 200 | Radhika | Severe Pain in Legs | 1 |

| 300 | Aditi jain | Mild Headaches | 2 |

| 400 | Snehal Soni | High fever | 3 |

| 500 | Karanveer Bohra | Hand injury | 2 |

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

4 rows in set (0.00 sec)

mysql> SELECT \* FROM Patient LEFT JOIN Doctor2 ON Patient.doctor\_id = Doctor2.id;

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

| id | name | diagnosis | doctor\_id | id | name | salary |

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

| 200 | Radhika | Severe Pain in Legs | 1 | 1 | Neelam | 50000 |

| 300 | Aditi jain | Mild Headaches | 2 | 2 | Yash | 25000 |

| 400 | Snehal Soni | High fever | 3 | 3 | Pranav | 20000 |

| 500 | Karanveer Bohra | Hand injury | 2 | 2 | Yash | 25000 |

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

4 rows in set (0.00 sec)

mysql> SELECT \* FROM Patient RIGHT JOIN Doctor2 ON Patient.doctor\_id = Doctor2.id;

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

| id | name | diagnosis | doctor\_id | id | name | salary |

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

| 200 | Radhika | Severe Pain in Legs | 1 | 1 | Neelam | 50000 |

| 300 | Aditi jain | Mild Headaches | 2 | 2 | Yash | 25000 |

| 500 | Karanveer Bohra | Hand injury | 2 | 2 | Yash | 25000 |

| 400 | Snehal Soni | High fever | 3 | 3 | Pranav | 20000 |

| NULL | NULL | NULL | NULL | 4 | Vijay | 35000 |

| NULL | NULL | NULL | NULL | 5 | Nayan | 30000 |

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

6 rows in set (0.00 sec)

mysql> SELECT \* FROM Patient JOIN Doctor2 ON Patient.doctor\_id = Doctor2.id;

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

| id | name | diagnosis | doctor\_id | id | name | salary |

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

| 200 | Radhika | Severe Pain in Legs | 1 | 1 | Neelam | 50000 |

| 300 | Aditi jain | Mild Headaches | 2 | 2 | Yash | 25000 |

| 400 | Snehal Soni | High fever | 3 | 3 | Pranav | 20000 |

| 500 | Karanveer Bohra | Hand injury | 2 | 2 | Yash | 25000 |

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

4 rows in set (0.00 sec)

mysql> SELECT \* FROM Patient WHERE Patient.doctor\_id IN ( SELECT id FROM Doctor2 WHERE salary < 30000);

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

| id | name | diagnosis | doctor\_id |

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

| 300 | Aditi jain | Mild Headaches | 2 |

| 500 | Karanveer Bohra | Hand injury | 2 |

| 400 | Snehal Soni | High fever | 3 |

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

3 rows in set (0.00 sec)

mysql> DELETE FROM Patient WHERE id = 200;

Query OK, 1 row affected (0.01 sec)

mysql> SELECT \* FROM Patient;

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

| id | name | diagnosis | doctor\_id |

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

| 300 | Aditi jain | Mild Headaches | 2 |

| 400 | Snehal Soni | High fever | 3 |

| 500 | Karanveer Bohra | Hand injury | 2 |

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

3 rows in set (0.00 sec)

mysql> UPDATE Patient SET name = "Aditya Jain" WHERE id =300;

Query OK, 1 row affected (0.01 sec)

Rows matched: 1 Changed: 1 Warnings: 0

mysql> SELECT \* FROM Patient;

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

| id | name | diagnosis | doctor\_id |

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

| 300 | Aditya Jain | Mild Headaches | 2 |

| 400 | Snehal Soni | High fever | 3 |

| 500 | Karanveer Bohra | Hand injury | 2 |

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

3 rows in set (0.00 sec)

mysql>