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| **5)Consider the given database schema: (JOINS)**  **Student(Student\_Id,Student\_Name,Instructor\_Id,Student\_City)**  **Instructor(Instructor\_Id,Instructor\_Name,Instructor\_City,Specialization)**  **Use all types of Joins**   1. **Find the instructor of each student.** 2. **Find the student who is not having any instructor.** 3. **Find the student who is not having any instructor as well as instructor who is not having student.** 4. **Find the students whose instructor’s specialization is computer.**   **Create a view containing total number of students whose instructor belongs to “Pune”.** |

mysql> use assg5;

Database changed

mysql> create table student(stud\_ID int, stud\_name varchar(20), inst\_ID int,stud\_city varchar(10), PRIMARY KEY (stud\_ID));

Query OK, 0 rows affected (0.27 sec)

mysql> create table instructor(inst\_ID int, inst\_name varchar(20), inst\_city varchar(10), specialization varchar(10),PRIMARY KEY (inst\_ID));

Query OK, 0 rows affected (0.26 sec)

mysql> drop database assg5;

Query OK, 2 rows affected (0.37 sec)

mysql> use assg5;

ERROR 1049 (42000): Unknown database 'assg5'

mysql> create database assg5;

Query OK, 1 row affected (0.00 sec)

mysql> tee /home/unix/Desktop/assg5;

mysql> use assg5;

Database changed

mysql> create table student(stud\_ID int, stud\_name varchar(20), inst\_ID int,stud\_city varchar(10));

Query OK, 0 rows affected (0.24 sec)

mysql> create table instructor(inst\_ID int, inst\_name varchar(20), inst\_city varchar(10), specialization varchar(10));

Query OK, 0 rows affected (0.24 sec)

mysql> insert into instructor values(100,"ABC","Pune","Comp");

Query OK, 1 row affected (0.05 sec)

mysql> insert into instructor values(101,"PQR","Pune","Comp");

Query OK, 1 row affected (0.04 sec)

mysql> insert into instructor values(102,"DEF","Nashik","Mech");

Query OK, 1 row affected (0.04 sec)

mysql> insert into instructor values(103,"NOP","Aurangabad","EnTC");

Query OK, 1 row affected (0.04 sec)

mysql> insert into instructor values(104,"XYZ","Nashik","EnTC");

Query OK, 1 row affected (0.03 sec)

mysql> insert into instructor values(105,"UVW","Mumbai","IT");

Query OK, 1 row affected (0.05 sec)

mysql> select \* from instructor;

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

| inst\_ID | inst\_name | inst\_city | specialization |

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

| 100 | ABC | Pune | Comp |

| 101 | PQR | Pune | Comp |

| 102 | DEF | Nashik | Mech |

| 103 | NOP | Aurangabad | EnTC |

| 104 | XYZ | Nashik | EnTC |

| 105 | UVW | Mumbai | IT |

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

6 rows in set (0.00 sec)

mysql> insert into student values(1,"Gauri","100","Pune");

Query OK, 1 row affected (0.04 sec)

mysql> insert into student values(2,"Mits",NULL,"Nashik");

Query OK, 1 row affected (0.04 sec)

mysql> insert into student values(3,"Sid",NULL,"Nashik");

Query OK, 1 row affected (0.03 sec)

mysql> insert into student values(4,"Pradz",105,"Mumbai");

Query OK, 1 row affected (0.04 sec)

mysql> insert into student values(5,"Swara",104,"Nashik");

Query OK, 1 row affected (0.04 sec)

mysql> select \* from student;

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

| stud\_ID | stud\_name | inst\_ID | stud\_city |

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

| 1 | Gauri | 100 | Pune |

| 2 | Mits | NULL | Nashik |

| 3 | Sid | NULL | Nashik |

| 4 | Pradz | 105 | Mumbai |

| 5 | Swara | 104 | Nashik |

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

5 rows in set (0.00 sec)

mysql> select student.stud\_name,instructor.inst\_name from student inner join instructor where student.inst\_ID=instructor.inst\_ID;

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

| stud\_name | inst\_name |

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

| Gauri | ABC |

| Swara | XYZ |

| Pradz | UVW |

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

3 rows in set (0.00 sec)

mysql> select stud\_ID,stud\_name FROM student left join instructor on studentstudent.stud\_ID=instructor.inst\_ID where ISNULL(student.inst\_ID);

ERROR 1054 (42S22): Unknown column 'studentstudent.stud\_ID' in 'on clause'

mysql> select stud\_ID,stud\_name FROM student left join instructor on student.stud\_ID=instructor.inst\_ID where ISNULL(student.inst\_ID);

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

| stud\_ID | stud\_name |

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

| 2 | Mits |

| 3 | Sid |

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

2 rows in set (0.01 sec)

mysql> select stud\_ID,stud\_name FROM student left join instructor on student.stud\_ID=instructor.inst\_ID where ISNULL(student.inst\_ID) and s) AND select inst\_ID,inst\_name FROM instructor left join student on instructor.inst\_ID=student.stud\_ID where ISNULL(instructor.inst\_ID);

ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near ') AND select inst\_ID,inst\_name FROM instructor left join student on instructor.i' at line 1

mysql> select student.stud\_name from student inner join instructor where student.inst\_ID=instructor.inst\_ID where instructor.specialization="Comp";

ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'where instructor.specialization="Comp"' at line 1

mysql> commit;

Query OK, 0 rows affected (0.00 sec)

mysql> notee;

mysql> select stud\_name from student inner join instructor on student.inst\_ID=instructor.inst\_ID where specialization="Comp";

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

| stud\_name |

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

| Gauri |

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

1 row in set (0.00 sec)

mysql> create view v2 as select count(stud\_name) from student,instructor where student.inst\_ID=instructor.inst\_ID and inst\_city="Pune";

Query OK, 0 rows affected (0.05 sec)

mysql> select \* from v2;

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

| count(stud\_name) |

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

| 1 |

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

1 row in set (0.00 sec)

mysql> select stud\_name as student\_instructorNAME from student left join instructor on student.inst\_ID=instructor.inst\_ID where isnull(student.inst\_ID) UNION select inst\_name from student right join instructor on student.inst\_ID=instructor.inst\_ID where student.stud\_ID is null;

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

| student\_instructorNAME |

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

| Mits |

| Sid |

| PQR |

| DEF |

| NOP |

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

5 rows in set (0.00 sec)