

RIT ISTE230	Introduction to Database & Data Modeling PE #07	Fall 2022 (2221)
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Name: Please print Last name (Lastname, Firstname) Eng, Chris _____

Practice Exercise 7

Posted First week of school

Due Monday October 24, 2022 @ 11:59pm

Assignment box PE07

Recommend that you download this Word Document and type your Answers. You can upload it as a Word Document and/or PDF Document

Use the following relations to answer the questions below. For each question, show the operations used. **WRITE the required MySql** AND the results. INTERSECTION and DIFFERENCE are **NOT** MySQL key words.

STUDENT

StudentID	Name	Major
123	Bill	IT
234	Sue	CS
345	Tom	SE
456	Ann	BUS
567	Linda	IT
678	Tom	IT
789	Sue	LA

ITSTUDENT

StudentID	Name	Major
123	Bill	IT
567	Linda	IT
678	Tom	IT
890	Jon	IT
901	Lynn	IT

1. What is the result of the union of STUDENT and ITSTUDENT?

Relational Operation Here

STUDENT \cup ITSTUDENT

MySQL Here

```
SELECT * FROM STUDENT
UNION
SELECT * FROM ITSTUDENT;
```

Results of Operation Here

StudentID	Name	Major
123	Bill	IT
234	Sue	CS
345	Tom	SE
456	Ann	BUS
678	Linda	IT
678	Tom	IT
789	Sue	LA
890	Jon	IT
901	Lynn	IT

Note: Not all rows may be used.

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2. What is the result of the intersection of STUDENT and ITSTUDENT?

Relational Operation Here

STUDENT \cap ITSTUDENT

MySQL Here

```
SELECT * FROM STUDENT
INNER JOIN ITSTUDENT ON StudentID;
```

Results of Operation Here

StudentID	Name	Major
123	Bill	IT
567	Linda	IT
345	Tom	IT

Note: Not all rows may be used.

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3. What is the result of the difference of STUDENT and ITSTUDENT?

Relational Operation Here

STUDENT-ITSTUDENT

MySQL Here

```
SELECT * FROM Student
WHERE Student.StudentID NOT IN(
  SELECT itstudent.StudentID
  FROM itstudent JOIN Student
  ON student.studentID = itstudentID);
```

Results of Operation Here

StudentID	Name	Major
234	sue	CS
345	tom	SE
456	ann	BUS
789	sue	LA

Note: Not all rows may be used.

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4. What is the result of the difference of ITSTUDENT and STUDENT

Relational Operation Here

ITSTUDENT-STUDENT

MySQL Here

```
SELECT * FROM ITStudent  
  
WHERE ITStudent.StudentID NOT IN (  
  
    SELECT student.StudentID  
  
    FROM student JOIN itstudent  
  
    ON student.StudentID = itstudent.StudentID);
```

----- or -----

```
SELECT * FROM ITstudent  
  
WHERE NOT EXISTS (  
  
    SELECT *  
  
    FROM student  
  
    WHERE student.studentID = itstudent.studentID);
```

Results of Operation Here

StudentID	Name	Major
890	jon	it
901	lynn	it

Note: Not all rows may be used.