

❗ This quiz has been regraded; your score was not affected.

Reading Homework 2 (Due Monday 2/5, 3:20PM)

Due Feb 5, 2018 at 3:20pm

Points 7

Questions 7

Available until May 20, 2018 at 3:21pm

Time Limit None

Instructions

The reading assignment is: Chapters 3.3.2 through 3.6.

As part of project 0, we distributed two Jupyter Notebooks that cover some of this material interactively.

- **Different Types of Joins:** (<https://github.com/abadid/cmsc424-spring2018/blob/master/project0/SQL%20-%20Different%20Types%20of%20Joins.ipynb>) Covers different types of joins (going beyond what is part of the reading assignment). Feel free to focus on the joins mentioned in the reading, but all of the joins in the notebook are useful.
- **SQL and NULLs:** (<https://github.com/abadid/cmsc424-spring2018/blob/master/project0/SQL%20-%20NULLs%20and%20UNKNOWN.ipynb>) Shows how NULLs are handled by different SQL queries. The end of the notebook --- where it discusses aggregations and group-by --- is only relevant after doing the reading assignment for the class after this one, so it probably makes sense to skip the end of the notebook until after the next class.

As before: if you open these in Jupyter (on your VM), then you can try out different queries and/or see how the operations behave on different inputs.

Remember that reading homeworks are mandatory; you can miss at most 2, but missing more than that will lead to lower overall grade points for the reading homeworks.

This quiz was locked May 20, 2018 at 3:21pm.

Attempt History

	Attempt	Time	Score	Regraded
LATEST	Attempt 1	11 minutes	5 out of 7	5 out of 7

Score for this quiz: **5** out of 7

Submitted Feb 5, 2018 at 11:46am

This attempt took 11 minutes.

Question 1**0 / 1 pts**

On the following two relations:

- $R(A, B) = \{ (a1, b1), (a2, b2), (a3, b3) \}$
- $S(B, A) = \{ (b2, a1), (b1, a2), (b3, a3) \}$

What is the result of "R natural join S" ?

You Answered

- ☒ $\{ (a1, b1, a2), (a2, b2, a1), (a3, b3, a3) \}$

Correct Answer

- ☐ $\{ (a3, b3) \}$

Question 2**0 / 1 pts**

On the following three relations:

- $R(A, B) = \{ (a1, b1), (a2, b2), (a3, b3) \}$
- $S(B, C) = \{ (b1, c1), (b2, c2), (b2, c1) \}$
- $T(C, A) = \{ (c1, a2), (c1, a1), (c2, a3) \}$

What is the result of "R natural join S natural join T" ?

You Answered

- ☒ $\{ (a1, b1, c1, a2), (a1, b1, c1, a1), (a2, b2, c2, a3) \}$

- ☐ $\{ (a1, b1, c1) \}$

- ☐ $\{ \}$ --- Empty

Correct Answer

- ☐ $\{ (a1, b1, c1), (a2, b2, c1) \}$

Question 3

1 / 1 pts

Fill in the blanks for the following query that returns the department name of departments that are located inside a building that begins with the letter 'P'.

```
select  name
        from department where building like '
P%';
```

Answer 1:

- Correct!
- name
- orrect Answer
- dept_name
- orrect Answer
- department_name
- orrect Answer
- dname
- orrect Answer
- d_name

Answer 2:

- Correct!
- P%

Question 4

1 / 1 pts

In postgres, I created two tables, inserted some values into them, and then I ran the following queries / got the following responses:

Query: select * from a;

Response:

```
int1 | int2
-----+-----
1 | 2
3 | 4
```

5 | 6

7 | 8

(4 rows)

Query: select * from b;

Response:

int1 | int3

-----+-----

1 | 3

3 | 4

4 | 5

(3 rows)

How many rows will be returned by the following query:

select * from a union all select * from b;



This query will return an error because the keyword "select" appears twice in the query.

Correct!



7



This query will return an error, since the second column of a and b have different names



3



6



1



4

Question 5

1 / 1 pts

What is the result of the boolean expression: ((NULL = 10) and (10 = 20)) or (NULL = 10)

- ☐ False
- ☐ True
- ☒ Null/Unknown

Correct!

Question 6

Original Score: 1 / 1 pts **Regraded Score: 1 / 1 pts**

❗ This question has been regraded.

What is the result of the boolean expression: ((NULL = 20) or (10 = 10)) and ((NULL = 10) is null)

- ☒ True
- ☐ False
- ☐ Null/Unknown

Correct!

Question 7

1 / 1 pts

If a relation had two copies of a tuple: (10, NULL) and (10, NULL), a "select distinct" on that would only return one copy even though "null = null" does not evaluate to true.

- ☒ True
- ☐ False

Correct!

Quiz Score: **5** out of 7