Reading Homework 3 (Due Wed 2/7, 3:20PM)

Due Feb 7, 2018 at 3:20pm　　　　**Points** 7　　　　**Questions** 7

Available until May 20, 2018 at 3:21pm　　　　**Time Limit** None

Instructions

The reading assignment here is: Chapters 3.7 and 3.8.

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

Attempt History

	Attempt	**Time**	**Score**
LATEST	[Attempt 1](#)	7 minutes	5 out of 7

Score for this quiz: **5** out of 7
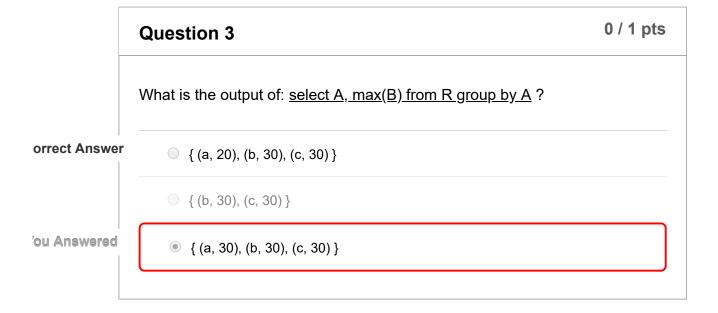Submitted Feb 6, 2018 at 11:15pm
This attempt took 7 minutes.

> Try to answer the following set of questions without using 'psql' or the
> notebooks (but you can check your work before you submit). The queries are
> on the following relation.
>
> - R(A, B) = { (a, 10), (a, 20), (a, 10), (b, 10), (b, 30), (c, 20), (c, 30) }

Question 1	**1 / 1 pts**

What is the output of: <u>select max(B) from R ?</u>

Correct!　　　◉　{ (30) }

　　　　　　　　　○　{ (b, 30), (c, 30) }

○ { (30), (30) }

Question 2

1 / 1 pts

What is the output of: <u>select min(A) from R</u> ?

○ { (c) }

Correct!

◉ { (a) }

○ { (a, 10), (a, 20), (a, 10) }

○ { (c, 20), (c, 30) }

Question 3

0 / 1 pts

What is the output of: <u>select A, max(B) from R group by A</u> ?

orrect Answer

○ { (a, 20), (b, 30), (c, 30) }

○ { (b, 30), (c, 30) }

'ou Answered

◉ { (a, 30), (b, 30), (c, 30) }

Question 4

0 / 1 pts

What is the output of: <u>select B, max(A) from R group by B</u> ?

○ { (10, c), (20, b), (30, c) }

orrect Answer   ○ { (10, b), (20, c), (30, c) }

'ou Answered   ◉ { (10, c), (20, c), (30, c) }

                     ○ { (10, a), (20, b), (30, b) }

Question 5   1 / 1 pts

What is the output of: <u>select A, max(B) from R</u> ?

○ All A values are returned with the max B value: { (a, 30), (b, 30), (c, 30) }

○ For each A, max B is computed: { (a, 20), (b, 30), (c, 30) }

Correct!   ◉ The query is invalid.

○

Only the A values that have the max B value are returned: { (b, 30), (c, 30) }

Question 6   1 / 1 pts

Assume you have a table called "prereq" that contains the following:

course_id | prereq_id
-----------+-----------
BIO-301 | BIO-101
BIO-399 | BIO-101
CS-190 | CS-101
CS-315 | CS-101
CS-319 | CS-101
CS-347 | CS-101
EE-181 | PHY-101
(7 rows)

How many rows are output by the following query:

with prereq_total (id,count) as
　　　(select prereq_id, count(*) from prereq group by prereq_id)
select course_id from prereq where prereq_id =
　　　(select id from prereq_total where count =
　　　　　(select max(count) from prereq_total));

- ○　5

- ○　2

- ○　1

- ○　6

- ○　This query returns an error

- ○　7

- ○　3

Correct!　　⦿　4

Question 7

1 / 1 pts

The following query is equivalent to the query from the previous question
(i.e., it always produces the same result, not matter what is contained in the
prereq table).

with prereq_total (id,count) as
　　　　(select prereq_id, count(*) from prereq group by prereq_id),
　　prereq_max (id) as
　　　　(select id from prereq_total where count = (select max(count) from
prereq_total))
select course_id from prereq where prereq_id in (select id from prereq_max);

- ○　True

Correct!

   ⦿   False

Quiz Score: **5** out of 7