Reading Homework 11 (Due Wednesday 04/04, 3:20PM)

Due Apr 4, 2018 at 3:25pm　　　**Points** 10　　　**Questions** 8
Available until May 17, 2018 at 11:59am　　　**Time Limit** None

Instructions

> The reading assignment here is: Chapters 12.1, 12.2, 12.3.1.

This quiz was locked May 17, 2018 at 11:59am.

Attempt History

	Attempt	Time	Score
LATEST	**Attempt 1**	less than 1 minute	0 out of 10

Score for this quiz: **0** out of 10
Submitted Apr 4, 2018 at 3:29pm
This attempt took less than 1 minute.

Question 1	1 / 1 pts

There are usually many different ways to execute the same query.

Correct!

- ● True

- ○ False

Question 2

1 / 1 pts

Optimizers generally try to minimize the response time for a query.

○ True

Correct!

◉ False

Question 3

1 / 1 pts

The query optimizer is typically responsible for confirming that the query syntax is valid.

○ True

Correct!

◉ False

Question 4

1 / 1 pts

Given two plans: (1) a plan that makes 1 random seek and reads 1000 blocks in total,
vs (2) a plan that makes 10 random seeks and reads 10 blocks in total, plan (1) is better
to use. Use the values from the book: t_S = 4ms and t_T = 0.1ms.

○ True

Correct!

◉ False

Question 5

1 / 1 pts

Given two plans: (1) a plan that makes 100 random seeks and reads 100000 blocks in total, vs (2) a plan that makes 1000 random seeks and reads 1000 blocks in total, plan (1) is better to use. Use the values: t_S = 5ms and t_T = 0.01ms.

Correct!

◉ True

◯ False

Question 6

1 / 1 pts

What would be value of t_T if you assume 8KB blocks and a 400MB/s disk transfer rate?

◯ 0.01ms

Correct!

◉ 0.02ms

◯ 0.05ms

◯ 0.2ms

Question 7

2 / 2 pts

Say we have a primary B+-tree of height 4 on attribute "zipcode" in an "person" table
(so there will be many records with the same zipcode, but the relation is sorted by
zipcode). Consider a query to find all people in a specific zipcode, and let's say there
are a 1000 records with that zipcode. Further, let's say a single relation block

can hold
10 records. Estimate the cost of executing this query (using Figure 12.3).
Assume t_S = 4ms, and t_T = 0.1ms.

○ Approximately 3ms

Correct! ⦿ Approximately 30ms

○ Approximately 60ms

○ Approximately 300ms

Question 8   2 / 2 pts

Do the same but with the assumption that the index is a secondary index
(i.e., the relation
data is not sorted by zipcode).

○ approximately 200ms

Correct! ⦿ approximately 2s

○ approximately 20s

○ approximately 200s

Quiz Score: **0** out of 10

This quiz score has been manually adjusted by -10.0 points.