Reading Homework 9 (Due Monday March 26 3:20PM)

Due Mar 26, 2018 at 3:25pm **Points** 10 **Questions** 10
Available until May 15, 2018 at 11:59pm **Time Limit** None

Instructions

The reading assignment here is: Chapters 11.1, 11.2.

This quiz was locked May 15, 2018 at 11:59pm.

Attempt History

	Attempt	Time	Score
LATEST	Attempt 1	13 minutes	7 out of 10

Score for this quiz: **7** out of 10
Submitted Mar 26, 2018 at 11:30am
This attempt took 13 minutes.

Question 1 — 1 / 1 pts

Sparse indexes can only be used if the relation is sorted by the search key.

Correct!

- (•) True
- ( ) False

Question 2

1 / 1 pts

Multi-level indexes are an improvement over single-level indexes because single-level indexes can sometimes be very large (and take up many blocks on disk), and multi-level indexes can help to reduce the space of a single-level index.

- True
- False

Correct!

Question 3

1 / 1 pts

Secondary indexes may or may not be dense.

- True
- False

Correct!

Question 4

0 / 1 pts

It is possible to have two clustering indexes on the same relation with two different search keys.

- True

'ou Answered

- False

orrect Answer

Question 5

0 / 1 pts

"Search key" is another name for a "primary key" in the context of indexes.

'ou Answered

- (•) True

orrect Answer

- ( ) False

For the next two questions, assume that index entries are scanned sequentially (instead of using something like binary search).

Question 6

1 / 1 pts

For the index in Figure 11.3 of your textbook, count the number of comparisons that must be done to find the record with ID 45565.

As an example, searching for "key=12121" goes: compare with 10101 and 32343 (in the index) to identify which pointer to follow (i.e. the pointer from 10101), then go to the relation, and compare sequentially with 10101, 12121. So it requires 4 comparisons.

- ( ) 4

Correct!

- (•) 6
- ( ) 8
- ( ) 10

Question 7

1 / 1 pts

For the index in Figure 11.4 of your textbook, how many comparisons are needed to find the record with: "dept = finance" and ID = 76543.

- 4
- Correct! 6
- 8
- 10

Question 8

1 / 1 pts

Calculate the total size of the index (Figure 11.5 of your textbook) if: the number of tuples in the relation is 2,000,000, and each block in the inner or outer index can store 200 pointer entries.

As an example, for the example discussed in Figure 11.5, the innermost index requires 10,000 blocks, and the outer index requires another 100 blocks, for a total of 10,100 index blocks.

- Correct! 10050
- 10500
- 20050
- 20500

Question 9

1 / 1 pts

Unlike primary indexes, secondary indexes must contain pointers to all the tuples in the relation.

Correct!

- (•) True
- ( ) False

Question 10

0 / 1 pts

Indexes on primary keys are often automatically built to make it easy to check for primary key constraint violations.

orrect Answer

- ( ) True

'ou Answered

- (•) False

Quiz Score: **7** out of 10