Quiz 9 Query Processing

Due Nov 8 at 10:30am

Points 100

Questions 5

Available Nov 8 at 10am - Nov 8 at 10:30am 30 minutes

Time Limit None

Instructions

This is a 30 minutes quiz with Multiple Choice Questions.

Having an issue with the quiz? Please send an email to the course staff (<u>rkheni@wpi.edu</u>) (<u>mailto:cvieira@wpi.edu</u>) with "CS542 Quiz" included in the subject line any time during the quiz. If you require help through zoom then please join the zoom link https://wpi.zoom.us/j/2094237642 ⊕ (https://wpi.zoom.us/j/2094237642.

This quiz was locked Nov 8 at 10:30am.

Attempt History

	Attempt	Time	Score
LATEST	Attempt 1	26 minutes	50 out of 100

Score for this quiz: 50 out of 100

Submitted Nov 8 at 10:26am This attempt took 26 minutes.

Question 1

10 / 20 pts

Given the following operation:

Grouping operator on realtion S (Group by column X), when S is sorted based on column Y

Is the operator non-blocking? No (Blocking)

Assume relation S is 1000 blocks.

What is the minimum number of memory buffers required to execute this operation in one pass? 32

Answer 1:

No (Blocking)

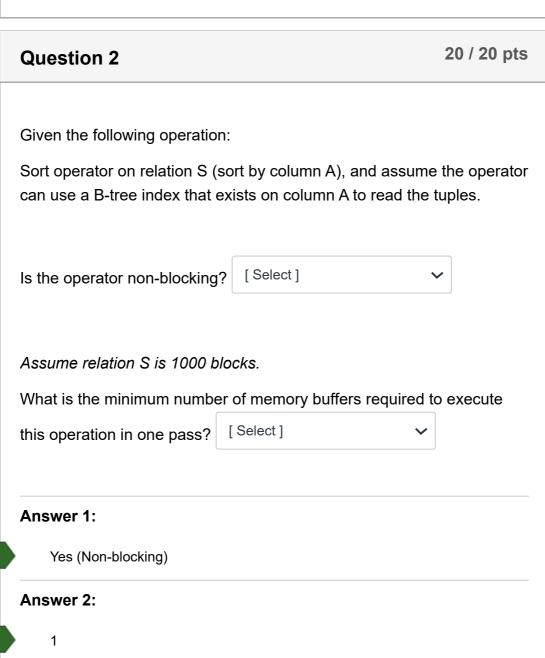
Answer 2:

Direct Answer

1000

Du Answered

32



Correct!

Correct!

	Question 3	0 / 20 pts
	What is the minimum number of main memory buffers nee perform a hash-join on the following relations: R: 40000 tuples, 10 tuples per block S: 20000 tuples, 20 tuples per block	ded to
	714000	
	O 1000	
ou Answered	6 4	
orrect Answer	O 32	
	Question 4	0 / 20 pts
	Question 4 For the efficient two-pass join algorithm covered in class (signal), assume we have available 100 memory buffers (M= R after the preparation phase for sorting, it generates 40 so What is the maximum size of relation S (in blocks) that the can handle to successfully do the join? (Choose the closes the correct one)	sort-merge- 100), relation orted runs. algorithm
	For the efficient two-pass join algorithm covered in class (s join), assume we have available 100 memory buffers (M=R after the preparation phase for sorting, it generates 40 so What is the maximum size of relation S (in blocks) that the can handle to successfully do the join? (Choose the closes	sort-merge- 100), relation orted runs. algorithm
orrect Answer	For the efficient two-pass join algorithm covered in class (s join), assume we have available 100 memory buffers (M=R after the preparation phase for sorting, it generates 40 so What is the maximum size of relation S (in blocks) that the can handle to successfully do the join? (Choose the closes the correct one)	sort-merge- 100), relation orted runs. algorithm
orrect Answer	For the efficient two-pass join algorithm covered in class (signin), assume we have available 100 memory buffers (M=R after the preparation phase for sorting, it generates 40 so What is the maximum size of relation S (in blocks) that the can handle to successfully do the join? (Choose the closes the correct one)	sort-merge- 100), relation orted runs. algorithm

	Question 5	20 / 20 pts		
	Given two relations, R and S with sizes shown below:			
	R: 40000 tuples, 10 tuples per block			
	S: 20000 tuples, 20 tuples per block			
	Assume there are 100 memory buffers available.			
	When doing a block-oriented nested loop join of R and S, which relation should be the outer relation to minimize the total number of I/Os? What is the total number of I/Os for this choice?			
	○ Use Relation R as outer; 41,405 I/Os			
	○ Use Relation R as outer; 44,000 I/Os			
	○ Use Relation R as outer; 44,405 I/Os			
orrect Answer	○ Use Relation S as outer; 41,405 I/Os			
	○ Use Relation S as outer; 44,405 I/Os			
ou Answered	Use Relation S as outer; 41,000 I/Os			

Quiz Score: 50 out of 100