



Mid-Term Review Session


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Overview of Mid-Term Exam

- ❖ Syllabus
 - Everything covered in class until now
 - Read lecture notes and text book
- ❖ Open book exam ☺
 - Text book
 - Lecture notes
 - Calculator
 - You should not use anything else
- ❖ 20% of your overall grade


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Logistics

- ❖ B17 Upson Hall (in the basement)
- ❖ Exam will start promptly at 7:30pm
- ❖ You should be in your seats by 7:25pm
- ❖ 2 hour exam

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Breakdown of Points

- ❖ Evaluation of Relational Operators (~ 25%)
- ❖ Roughly equal weight to remaining topics (~ 75%)
 - ER Model
 - Relational Model
 - Relational Algebra
 - Relational Calculus
 - SQL
 - Disks, Files, File Organizations
 - Tree Structured Indices
 - Hash Indices
 - External Sorting

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Tips (or How do I Ace the Mid-Term?)

- ❖ Thoroughly read and understand material
 - Lecture notes
 - Text book
- ❖ Practice questions
 - Assignments
 - Exercises in back of text book, solutions linked off course web page
- ❖ Remember, open book doesn't mean you don't have to study
 - Not studying is probably the biggest mistake you can make (How NOT to Ace the Mid-Term!)
 - Questions such that notes and book will be of no use unless you already know material very thoroughly

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Academic Integrity

- ❖ No cheating will be tolerated
- ❖ Violations taken very seriously
 - Definitely a zero on the mid-term
 - In addition, will prosecute to the maximum extent possible

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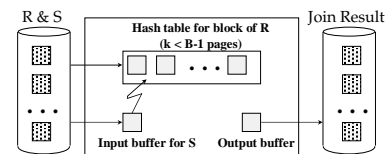
Overview of Remainder of Class

- ❖ Discuss some issues that people were confused about
- ❖ Answer questions of "general interest"
- ❖ TAs will hold additional question-answer session during CS433 class
 - Can ask specific questions to individual TAs there

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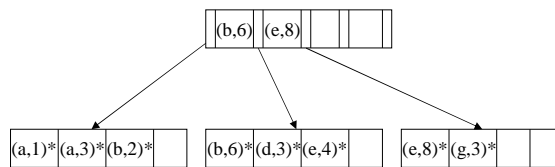
Block Nested Loops Join

- ❖ Use one page as an input buffer for scanning the inner S, one page as the output buffer, and use all remaining pages to hold "block" of outer R.
 - For each matching tuple r in R-block, s in S-page, add $\langle r, s \rangle$ to result. Then read next R-block, scan S, etc.



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B+ Tree with Composite Keys



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Questions?

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