

Query processing - 1 mth

Transaction Processing - 1 mth

Distributed Databases / Data Warehousing

Team project, Modify a DBMS

Lecture 1 Overview of Query Evaluation

Objectives

Preliminaries

- Core Processing
- Catalog
- Access paths to data
- Index matching

Query processing

- Selection
- Projection
- Joining

Query optimization

- Query plans
- Alternative query plans

Overview of Query evaluation (processing)

Evaluating SQL Queries

- Parsed, then translated to form an evaluation plan

Plan: Tree of R.A. Ops with alg. choice for each op.

Two main issues in optimization:

- Enumerating Alternative plans
- Estimating costs and selecting best estimated Query.

Techniques used in Query evaluation:

Indexing - Using WHERE conditions to retrieve tuples

Iteration - Examining all tuples in a relation instance one after the other

Partitioning - Grouping the set of input tuples in smaller sets