

BPI2131 Database Management and System Services

Course information

Requirement: practical grade

Contact: vegera.jozsef@nye.hu

Topics

Query Processing. The Query Translator. Syntactic Analysis and Parse Trees. The Preprocessor. Algebraic Rules for improving query plans. Transforming parse trees into logical query plans. Improving logical query plans. Estimating the cost of operations. Introduction to cost-based plan selection. Heuristics for reducing the cost of logical query plans. Selecting the order of joins. Join trees. Dynamic programming for selecting join order and grouping. Selecting the physical query plan. Selection of the selection procedure and the join procedure. Pipelining and materialization. Ordering of physical operators. Introduction to query execution. Oracle Database Management and Programming. Installation and operational issues of the Oracle database management system. Learning the Oracle PL/SQL language.

Requirements

Semester requirement: two written assignments

Bibliography

- Lecture outline
- H. Garcia-Molina, J. D. Ullman, J. Widom: Database systems. The Complete Book. Pearson, 2009.