## Query Optimization Exercise1

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April 2014

## 1 Exercise 1: SQL queries and execution plans

The execution plans are the same as the queries are executed in the programming exercise using tinydb.

## 1.1 Query 1

SELECT s2.name FROM studenten s1, studenten s2, hoeren h1, hoeren h2 WHERE

s1.name = "Schopenhauer" AND

s1.matrnr = h1.matrnr AND

h2.vorlnr = h1.vorlnr AND

h2.matrnr = s2.matrnr AND

s1.name <> s2.name;

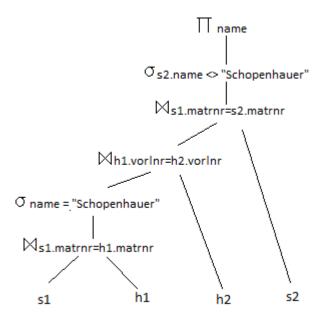


Figure 1: Query 1

## 1.2 Query 2

 ${\tt SELECT~p.name}$ 

FROM professoren p<br/>, hoeren h<br/>1, hoeren h<br/>2, vorlesungen v $\operatorname{WHERE}$ 

h1.matrnr <> h2.matrnr AND h1.vorlnr = h2.vorlnr AND v.vorlnr = h1.vorlnr AND v.gelesenvon = p.persnr;

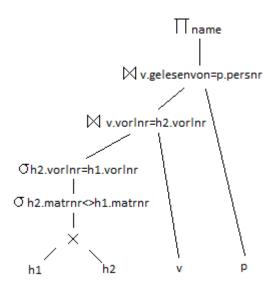


Figure 2: Query 2