Institut für Informationssysteme
Technische Universität Braunschweig

Technische Universität Braunschweig
Institut für Informationssysteme
http://www.ifis.cs.tu-bs.de

Wolf-Tilo Balke, Christoph Lofi

i

Deductive Databases & Knowledge Based Systems

Sheet 8

(until 26.05.2008)

Exercise 1

Try to answer **briefly**, precisely and understandable (remember: we will have oral exam - abstracting and explaining is important).

1. What is the conceptual difference between Jacobi and Gauss-Seidel iterations?
2. Which problem does the semi-naïve evaluation method address? How is the problem solved?
3. What is the base idea of query rewriting?
4. What is the base idea of push-selection? When and why does it not work?
5. What is the base idea of the magic sets method? What do the actual magic sets contain?

Exercise 2

Given is the following Datalog program:

```
e(3,1). e(2,5). e(2,3). e(6,1). e(5,6).
p(X,Y):-e(X,Y).
p(X,Y):-e(X,Z),p(Z,Y).
```

Perform a delta-iteration on the program.