

## Homework 5

a) Give an example of a Datalog program without functional symbols, for which naive evaluation described in the last slide of

[http://www.dcs.fmph.uniba.sk/~plachetk/TEACHING/RLDB2025/rldb2025\\_1.pdf](http://www.dcs.fmph.uniba.sk/~plachetk/TEACHING/RLDB2025/rldb2025_1.pdf)

terminates and computes a result which does not agree with the well-founded model. Explain the reason for the difference.

b) Formulate the program from the task a) as an SQL query. Report the query, and report what it computes in PostgreSQL. Report the version of PostgreSQL which you used.

c) Modify the naive evaluation (write readable pseudo-code in relational algebra similar to the aforementioned slide) which computes answers which agree with the well-founded model.

Explain.