Technische Universität Dresden

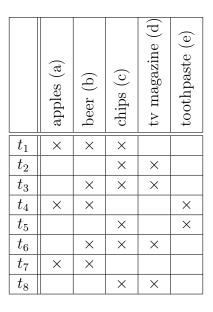
Prof. Dr. Sebastian Rudolph

Formal Concept Analysis Exercise Sheet 10, Winter Semester 2016/17

Exercise 1 (association rules)

We regard the context of transactions of a supermarket. Determine

- (a) the *support* and the *confidence* for the association rules
 - {tv magazine} \rightarrow {beer},
 - $\{\text{chips}\} \rightarrow \{\text{tv magazine, beer}\}$ and
 - {tv magazine, beer} \rightarrow {chips}
- (b) as well as at least two further association rules with a minimal support of 25% and a minimal confidence of 66%.



Exercise 2 (computing the stem base with NEXT CLOSURE)

Determine the stem base for this context using the NEXT CLOSURE algorithm. Use the following table as help:

| | Mobil (1) | Telefon (2) | Fax (3) | Fax m. NAdapter (4) |
|------------------|-----------|-------------|-----------|---------------------|
| Sinus 44 (a) | | × | | |
| Nokia 6110 (b) | × | × | | |
| T-Fax 301 (c) | | | × | × |
| T-Fax 360 PC (d) | | | × | |

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