

### **T-122.103 EXERCISE 6/2003**

In T4 on 14 November 2003 at 12:15–14 o'clock.

Recall the notation for the sets of variables:  $ABC = \{A, B, C\}$  etc.

1. Investigate the data set “smallilmo” to see if you can find any fragments of order of length 3 from it.
2. Given a 0/1 data set with  $n$  rows and where the attributes are independent and 1 with probability  $p$ , what is the expected number of violations of a fragment  $A < B < C$ .
3. We considered in the lectures the greedy approximation algorithm for the set cover problem. What other types or additional heuristics could one use for this task?