

Übungen zur Vorlesung
Wissensentdeckung in Datenbanken
Sommersemester 2007
Blatt 4

Aufgabe 4.1

The following exercise deals with the algorithm FP-growth which was presented in the lecture. If you have problems with understanding, please read the paper of Han et. al.: Mining Frequent Patterns without Candidate Generation

Because of the holiday (01.05) the deadline for this exercise is on 09.05.2007.

Club	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11	F12
Schalke	X	X	X	X	X	X	X	X	X		X	X
Gladbach		X		X	X	X			X	X	X	
Bochum	X					X	X	X				
Hamburg		X			X	X	X					
Berlin				X				X				
Hannover	X				X		X		X			
Nuernberg	X		X	X	X	X	X	X	X		X	X
Stuttgart			X	X				X	X			X
Bayern										X		

- Define the Header-table and also the FP-tree from the given transactiontable! Work with a minimum-support of $1/3$ (also in the following exercises)!
- Define all conditional pattern bases of the FP-tree!
- Now define the conditional pattern bases of the conditional FP-trees! Mind the minimum-support!
- Define recursively the frequent patterns with the conditional FP-trees! Show the coverage of the frequent patterns for each development of the conditional pattern bases and also the conditional FP-trees.