



Exercise Sheet 5: Relational Model (until Thursday 01.12.2011)

Please note that you need **50%** of all exercise points to receive the “Studienleistung”. Exercises have to be turned in until **Thursday** of each respective week and must be completed in teams of two students each. You may hand in your solutions either on paper **before the lecture** or into the mailbox at the IFIS floor (Mühlenpfordtstraße 23, 2nd floor). Please do not forget your “Matrikelnummer” and your tutorial group number on your solutions. Your solutions may be in German or English. Please note: To pass the “RDB I Modul” you need the exercise points and the exam! Please always use your own words for all questions.

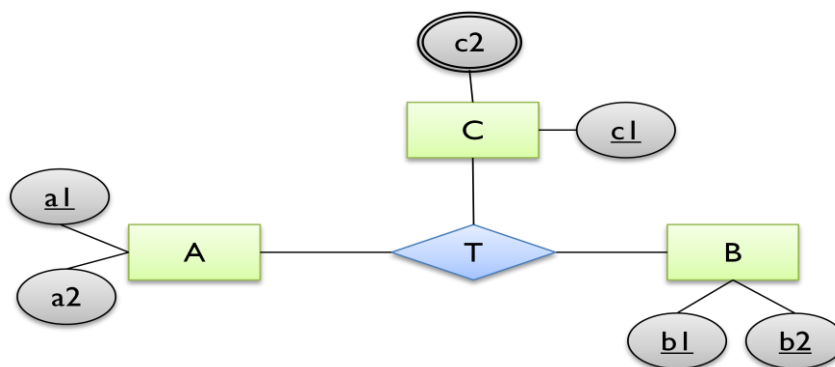
Exercise 5.1 (4 points)

- a) Name and explain the three different types of structural constraints mentioned in the lecture. (3 points)
- b) Briefly explain what is meant by the first normal form. (1 point)

Exercise 5.2 (7 points)

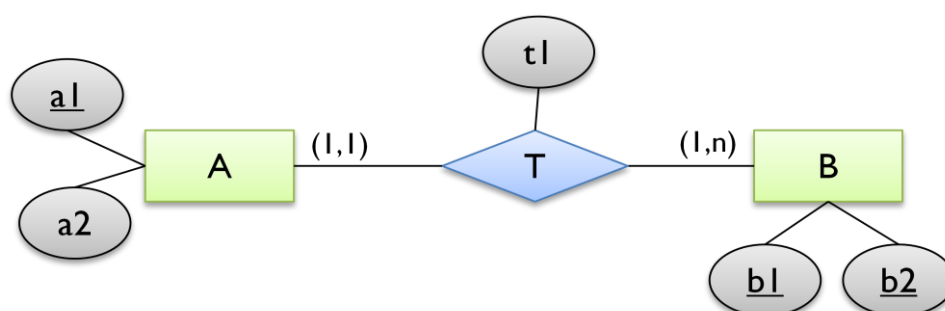
Translate the following ER-Schemata to relational schemata. Please write down all additional constraints that are not represented in your relational model.

a)

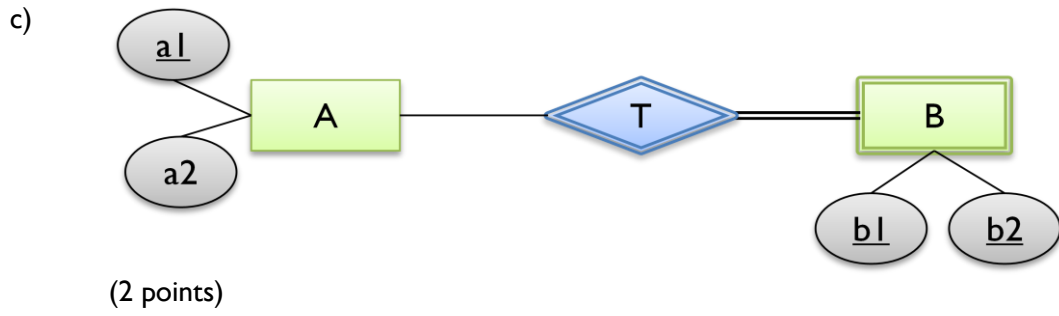


(3 points)

b)



(2 points)



Exercise 5.3 (10 points)

Translate the following ER-Schema to relational schemata. Please write down all additional constraints that are not represented in your relational model.

