

# Introduction to Database Design, Fall 2011

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## Exercises on E-R modeling

1. Question 1 from IDB trial exam, fall 2003 (page 47 in the collection of exam problems). Explanation of E-R notation in part b): For each Bravo there is at most one Charlie, i.e., in the notation of KBL it would be 0..1 next to Bravo and \* next to Charlie.
2. Consider to what extent SQL DDL can be used to make a DBMS maintain the following types of constraints from an E-R model (when translated to relations): General cardinality constraints a. .b? Participation constraints? Disjoint Isa?  
The answer can depend on how the translation is performed. If you happen to know about triggers, you should *not* use them here. If you don't know about triggers you should also not try to use them. As a side remark, this holds also for firearms.
3. BDLF exam, January 2009, problem 1 (page 3).
4. IDB exam, January 2004, problem 1 (page 42).