HOMEWORK

Homework 5

Reasoning

When working with databases we might want to put constraints on the data we allow in our relations, to do this we can use a number of methods and in this homework it's up to you to describe/work with these:

1. Explain the difference between an attribute-based constraint and a tuple-based constraint, give an example of both based on your design solution.
2. Give an example of a problem that each of the following constraints could solve and how:
   - Attribute-based check constraint,
   - Tuple-based check constraint,
   - Trigger

Homework 5 P+

Constraints, references and NULL

- You have Identified and introduced constraints (keys, tuple based checks, attribute based checks) on at least one relation in your database schema. What restrictions, if any, do each of these constraints enforce if the value of an attribute is NULL?
- For the following constraints, please briefly explain in general what would happen if a NULL value would be passed in to a relation guarded by the constraint type:
  1. Attribute constraints
  2. Unique constraints
  3. Check constraints
  4. Primary key constraints
  5. Foreign key constraints

Limit your answer to max 150 words (for all five types of constraints).