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SQL exercise blog system

The purpose of this assignment is that you will train your JOINs, subselects and aggregation skills.

Exercise 1 (data modelling)
By now, it should be possible to handle the following data in your blog system:

- Users can register with relevant metadata
- Users can have different roles, eg. author, admin, commentator
- Blog posts can be established with a headline, content and a picture
- A blog post can be categorized in multiple categories
- A blog post can be tagged with multiple tags
- A blog post can have a status, eg pending, published, archived, hidden

It should also be possible to define what a user has rights to do. We need to distinguish between “reading”, “establish”, “edit” and “delete”. These rights should be tied up to a role, so that it is possible to specify what that role has rights to do. Eg. an author should be able to read, establish and edit.

Exercise 2 (date)
It should be possible to find out, at what time a blog post has been established and when it has been edited. If that is not possible in your database design, you should now edit it, so that blog posts can be stamped with a date.

Then you need to work out the SQL expression(s) that makes it possible to get blog posts from the latest 10 days that are allowed to be read by all.

The following data needs to be included in your dataset:

- Title
- Publishing date
- Date for the latest editing
- Author
- Tags
- Categories

Exercise 3 (recursive categories)
Now, a blog post can belong to multiple categories. We now wish that categories could belong to each other.

1. What changes do this take to the ER diagram?
   Tip: *Self Join* could be worth looking into for this one

2. What SQL expression can be used to collect all categories on the first level?

3. What SQL expression can be used to collect all categories on first and second level?