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Homework-01-part1

*1)****Theoretical query:****Come up with a query that you want to make in the mondial database in PostgresSQL--something that might be interesting and challenging. Just describe it in English, and we will look into it on Tuesday. It could be something that you try out and are unable to make work, or it could be something that just sounds interesting to you.*

Print the five leading countries in global Coltan mining with their names spelled out. Sort them by their GDP and/or by their political stability.

Would it also be possible to print countries and/or companies in countries that imported the biggest part of the Coltan?

Homework-01-part 2

**Connections between Borges’ Library of Babel and Castelles Essay „[Relational and Non-Relational Models in the Entextualization of Bureaucracy](http://computationalculture.net/article/relational-and-non-relational-models-in-the-entextualization-of-bureaucracy" \t "_blank)**

Jonathan, you had us read two interesting texts. Even tough I am totally new to SQL and to the history of database models (not totally new to Borges, however), as described in Castelles Essay, I can certainly see and point out some links between the two texts – at least if I am not totally mistaken. Before I begin I have to admit to you that I didn’t totally understand how the described network-database model of Bachmann works – it seems to me much more complicated than the relational model. Therefore I will only focus on comparing the latter with Borges’ Library.

At first glance, when looking at the big picture one could argue that there are parallels between Borges’ idea of a seemingly endless (or truly endless) library, of a “bibliographic universe” that contains every book ever written – and therefore all the knowledge of mankind – and the dream of a database being a complete virtual memory, or as stated by Castelle, “the long-fantasized total information system” (Castelle, Models, p. 3).

On a personal note I can absolutely relate to that. When we were playing around with the mondial database and all of a sudden all these informations were popping up, it kind of felt the way Borgers described:

*“When it was announced that the Library contained all books (aka all the informations), the first reaction was unbounded joy. All men felt themselves the possesors of an intact an secret treasure. There was no personal problem, no world problem whose eloquent solution did not exist – somewhere in some hexagon.” (Borges, Library, p. 115).*

At second glance, however, Borges’ complete Library is an organizational nightmare. If every book contains 410 pages with 40 rows each and with 80 signs on each row and if an alphabet of 25 signs is being used, then the number of books in the Library is indeed unimaginable. Therefore it is not a place of complete joy and happiness, it is not order but rather the opposite of it – chaos.

And, when I again think back of our querys from last week when I made a mistake or had a typo in my query and there was an error message – or worse – absolutely nothing happened, I felt like the tired and unsuccessful researchers or the inquisitors that got almost killed because of the missing steps.

The organizational structure of Borges’ Library, however, can be compared with a relational database:

*“The arrangement of the galleries is always the same: Twenty bookshelves, five to each side, four of the hexagon's six sides; the height of the bookshelves, floor to ceiling, is hardly greater than the height of a normal librarian (Borges, Library, p. 113).“*

And:

*„Each wall of each hexagon is furnished with five bookshelves; each bookshelf holds thirty-two books identical in format; each book contains 410 pages; each page, forty lines; each line, approximately eighty black letters. There are also letters on the front cover of each book; those letters neither indicate nor prefigure what the pages inside will say.In all the library, there are not wo identical books“ (Borges, Library, 114-115).*

This reminded me of the order of the relational database model that Castelle decribes in his essay. He describes a model that collects and “presses” data into tables (relations) in which each tupel is a record and consists of several attributes (which are the columns of the table – if I understood it correctly. That could be – if we stay with the example of a Library – the book-ID, author, publisher, year, etc. They are all used to describe a book and every record or, in that case, every book, is unique and has to be identifiable through its key (or keys) – as are the books in Borges’ Library of Babel.

There’s also the link to other tables in the relational database model:

*„One of the hexagon's free sides opens onto a narrow sort of vestibule, which in turn opens onto another gallery, identical to the first, identical in fact to all“ (Borges, Library, p. 113).*

And, last but not least, there’s also the mutual interest in an index. In Borges’s Library librarian an researchers spend their whole lives attempting to find the key book or catalog in order to make sense of the library – or, as Borges writes, the “book that is the cipher and perfect compendium of all other books”, the so-called “catalog of the catalogs” (Borges, Library, p. 113).

In a relational database an index offers a quick and easy access to data – they can be created on combinations of several attributes on a relation, like we did with our queries on Thursday.

Finally, when Castelle mentioned infinite cloud based storage solutions, I thought of the infinity of Borges’ Library („I declare the library is endless“ (Borges, Library, p. 113-114)). But I have to admit that cloud technology goes far beyond my technical knowledge and understanding, so let’s leave it at that.