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Database Management
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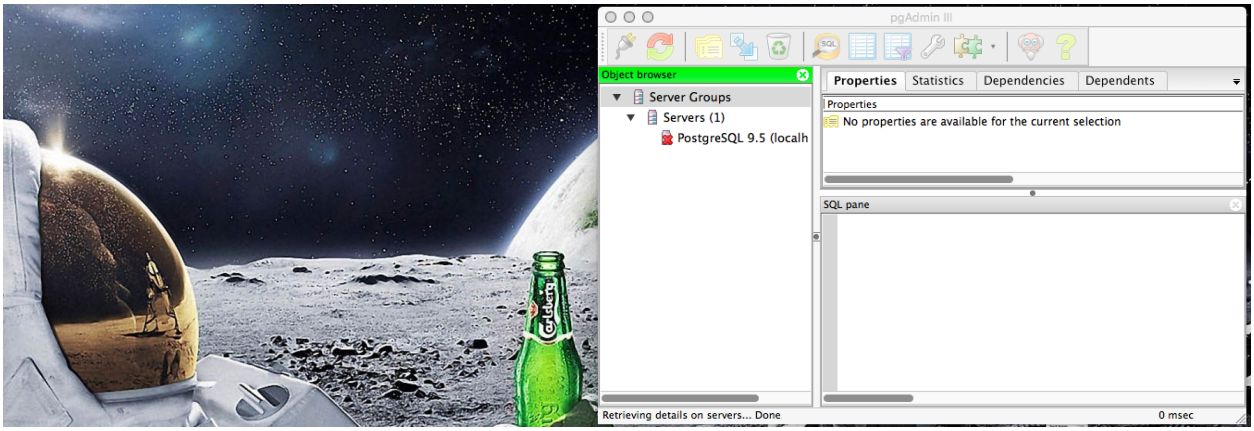

Short Essay 1:

The CIA stores all of their data into one of the largest databases in existence today. They contain the data to most of the people, places, and things in the United States. However, all of this data is meaningless unless it is organized into different categories. These categories then provide information behind all the data that is stored. Lets say the CIA just caught another terrorist and they add it to their never-ending wall of data. This information means nothing if it isn't categorized. Assuming they categorize it correctly, meaningful statistics can come from this newfound information. How many terrorists were killed in total, if the number increased or decreased from previous years, and other important details can be provided from databases. All of this information practically guides the world we live in today. If you're shopping online for shoes, suggested pairs you may like appear on the side as advertisements. This statistical information gives companies time to prepare for what their customer's next move is going to be.

Short Essay 2:

A hierarchical data model organizes the data into a tree-like structure. Generally, their is a parent with a large set of traits or values at the head of the tree. Then there is a subset of children which all go under the parent data. The children contain some or all of the values that the parent does. This tree-form model is to eliminate repetition. The network model also follows the parent-child format, similar to the hierarchical model, however it allows for more than one parent. The network model insists that child data may have more than one parent linked. This

model is not quite as organized as the hierarchical model, but it is more versatile. Although, both models are surpassed by the relational model. Unlike the hierarchical and network data models, the relational model categorizes the information into tables. These tables are filled with records, with each record containing the same fields. This allows for superior organization and is much easier to navigate through than the hierarchical or network models. Rather than linking values together, the relational model connects tables, allowing for large amounts of data to be used at once. XML would not be fit for large data storage, so I would advise against using it.