## Ryan deMayo Database Management Lab 1

Data vs Information: Marist College Student Information. It holds addresses, names, social security numbers, telephone numbers, housing information, and academic information. It assigns this data to a person, which makes it information, otherwise all of this data would be meaningless addresses and numbers. For example, 123454321 without any context is just a number that could mean anything, but once it is placed in the database under a person and titled a social security number it becomes information.

Data Models: The Hierarchical data model organizes data in a tree-like structure. In this model, data is connected through links from one point to another. The network data model works similarly to the hierarchical model, in that data is connected through links, but the major difference is that each piece of data can be pointed to multiple times, which saves space. These two models fall short compared to the relational model. They lack any way to efficiently store data that is not being used, or has no relation to anything at the moment, and are not very good at saving space. The XML model looks similar to the hierarchical model, in that data is connected together. It does not seem better than the current relational model in use today.

