# MINI 1 DUE Friday, March 8, 2019 BY 10:00PM to your Canvas “MINI 1” Assignment

# Will Boland — A290 SQL — 3/8/2019

### For EACH of these 3, please write up the following and have it ready to submit by the assigned deadline:

1. **List the 3 URIs you used as a result of your search.**

* Question 1 URI’s
  + <https://www.lifewire.com/what-is-a-database-1019737>
  + <https://www.guru99.com/introduction-to-database-sql.html>
  + <https://www.quora.com/What-is-the-difference-between-a-file-system-and-a-database/answer/Christian-Smith-2>
* Question 2 URI’s
  + <http://javasefx.blogspot.com/2010/02/understanding-difference-between-sql.html>
  + <https://www.ibm.com/support/knowledgecenter/ssw_ibm_i_71/db2/rbafzsqlcon.htm>
  + <https://kb.iu.edu/d/ahux>
* Question 3 URI’s
  + <https://www.ibm.com/support/knowledgecenter/en/zosbasics/com.ibm.zos.zmiddbmg/zmiddle_46.htm>
  + <https://www.c-sharpcorner.com/UploadFile/65fc13/types-of-database-management-systems/>
  + <https://www.geeksforgeeks.org/database-management-system-introduction-set-1/>

**2. Offer a 1 or 2 paragraph précis of the topic. Summarize what was said in what you read. Condense and clarify what was said in what you read, using the words and phrases of the author(s) in a very limited way, if needed. You are trying to state what the author(s) discussed in your own words. What did the author say or try to show was important?**

Topic (Question) 1 Précis

A database is an organized way of storing and retrieving information; a collection of similar data. Some examples of databases are phone books, electronic lists, or a cook book. The main “kinds” of databases are electronic or on paper, such as a filing cabinet. Databases must be consistent at “any instant in time”. Some key features of a database is that you should be able to retrieve all records given a query, update records, and reference other tables. Another feature of a database is to be able to perform calculations. Databases are different than spreadsheets in the fact that they are much better for storing large amounts data.

Topic (Question) 2 Précis

SQL, Structured Query Language, is a language in which you tell SQL what you desire to have; yet, not how to get to that answer. In essence, it is specifically used to remove, update, and retrieve data from databases given a certain query. It differs from other programming languages, one of which is C, by that with those languages you specify what is to be accomplished with how to accomplish that task. SQL is also a data definition language, a data manipulation language, a data control language, and lastly, a query language. SQL is used in conjunction to with DBMS in order to retrieve information from databases, given a specific query.

Topic (Question) 3 Précis

DBMS, database management system, is a “computerized data-keeping system.” A DBMS is a software system that organizes and stores data, which can be edited, removed, or added too. In essence, it is software that manages a database. There are a lot of different database management systems, some of which include, but are not limited to network databases, hierarchical databases, object-oriented databases, and relational databases. Some common DBMSs are MySQL and Oracle. DBMSs usually help in defining definitions, updating data, and user administration.

**3.**  **Offer, again in your own words, a summary explanation of what you think the two or three most important points were in what you read.**

Topic (Question) 1 Summary

A database is a structured organization of data. The authors seemed to draw attention to the fact that they can be any form, not just electronically. One such example provided was a grocery list. They seemed to portray this importance in order to demonstrate how to think about databases. The authors also drew attention to explaining the key features of databases: updating records, queries, and referencing other tables. Lastly, they are better than spreadsheets because they are more efficient at storing large amounts of data.

Topic (Question) 2 Summary

Structured Query Language is a language that, given a query or string of “questions”, will retrieve, from a database of table(s), specific record(s) from that database. This is an important difference from other traditional programming languages, such as C, Swift, etc. because with those, you need to specify how it will retrieve that data (or perform a function). This is an important distinction made throughout the articles because it provides information about different languages and their purposes. SQL is used in partnership with a database management system to retrieve particular information from databases.

Topic (Question) 3 Summary

A database management system (DBMS) is a software system that can manage data stored in a database. Its primary function is to manage a database. They key points brought away from the authors, besides the previously stated, is that there are a lot of different types of DBMSs and that each one has different ways of handling databases. One such type, a hierarchical database, can be most simply explained as a tree like structure, such as the way a file explorer is. Another type is a network database, which can provide multiple different paths to different tables. Overall, the key points expressed above are the main take aways from the readings.