SQL Standards

- The SQL Language has been around and used heavily for almost 40 years
- The SQL Language has gone through some changes over the years
- Different software companies customize their implementation of SQL to provide more usability for their database customers

SQL Standards

We recently talked about different RDBMS software products, such as

- IBM DB2
- Oracle
- MySQL
- Microsoft SQL Server
- PostgreSQL

SQL Standards

- Each of these vendors maintains their own unique SQL language syntax and command set
- They are NOT all the same
- We will be using PostgreSQL in this class

SQL Standards

- From one DBMS to another, SQL is pretty much the same, but there are some differences
- As you learn SQL, it is important for you to understand whose version of SQL you are learning, and how it might different from other versions

SQL Standards

Examples:

Language Component	Microsoft SQL Server	MySQL	PostgreSQL	SQLite
Data is Case Sensitive **	Yes. WHERE NAME = 'Tom' and WHERE NAME = 'tom' are NOT the same	No. WHERE NAME = 'Tom' and WHERE NAME = 'tom' are the same	Yes. WHERE NAME = 'Tom' and WHERE NAME = 'tom' are NOT the same	Yes. WHERE NAME = 'Tom' and WHERE NAME = 'tom' are NOT the same
Quotation Marks **	NAME = 'Tom' (only)	NAME = 'Tom' or NAME = "Tom"	NAME = 'Tom' (only)	NAME = 'Tom' or NAME = "Tom"
Column Name Alias	SELECT SUM(column name)=total	SELECT SUM(column name) AS total	SELECT SUM(column name) AS total	SELECT SUM(column name) AS total

** also depends on the SQL Compiler

SQL Standards

More Examples:

- TOP versus LIMIT and ORDER BY
- TRIGGERS – before, after, instead of, etc.
- ISNULL function
- CHECK constraint
- Concatenation
- Handling DATEs

SQL Standards

As we move forward

- I will teach the SQL-92 standard
- We will practice using the PostgreSQL implementation of SQL using bit.io as our compiler and test environment
- I will try to point out non-standard syntax differences that come up

SQL Standards

Who Cares?

Why should YOU care?

- If you write code for one DBMS platform, and then your organization changes your DBMS platform, you will probably have to rewrite and retest your SQL code