# 8/25/17

* Bit, byte, kb, mb, gb, tb
* SQL = Structured Query Language

# 9/6/17

* Sql compiles to relational algebra
  + If it is written incorrectly, then the code is wrong.
* Relational Model of the DataBaseManagementSystem
  + Very simple
  + Attribute/column/field – also degree
  + Tuple/row/record – also cardinality
* Entity Relationship Model
  + UML: unified model language
  + Object Oriented programming
* What is SQL?
  + Declarative
    - Say what you want without specifying how
  + Has many standards
    - ANSI SQL
    - SQL-92/SQL2
    - SQL-99/SQL3

# 9/14/17

* Includes multiple operators
  + Let R be a relation and t be a tuple with the same set of attributes
    - EXISTS R is true if and only if R contains at least one tuple
    - t IN R is true if and only if t equals a tuple R
    - t > ALL R is true if and only if R is unary (has one attribute) and t is greater than every value in R
      * can use any comparison operators
      * if we use <>, r need not be unary
    - t > ANY R (which is unary) is true if and only if t is greater than at least one value in R
    - We can use NOT to negate EXISTS, IN, ALL, and ANY.

# 9/22/17