**SQL (Structure Query Language)**

SQL is standard language for accessing and manipulating database. SQL lets you access and manipulate database.

Although SQL is an ANSI/ISO standard, there are different versions of the SQL language. However, to be compliant with ANSI standard, they all support at least the major commands (such as SELECT, UPDATE, DELETE, INSERT, WHERE) in a similar manners.

What can SQL do?

* Insert, update, delete record from database
* Create new database
* Create new tables in a database
* Execute queries against a database
* Retrieve data from database

DBMS (DataBase Management System)

MS SQL Server, IBM DB2, Oracle, MySQL, Microsoft Access etc.

The data is stored in database objects called table.

Example: Select all records from the customers table

SELECT \* from Customers;

Every table is broken up into smaller entities called **field.** A field is column in table and A **record** is called row.

**SQL Syntax**

SQL statement consists of keywords

Some of the most important SQL commands

* SELECT – Extracts data from database
* UPDATE – update data in a database
* DELETE – delete data from a database
* INSERT INTO – Insert new data into a database
* CREATE DATABASE – creates a database
* ALTER DATABASE – modifies a database
* CREATE TABLE – creates a new table
* ALTER TABLE – modifies a table
* DROP TABLE – delete a table
* CREATE INDEX – creates an index (search key)
* DROP INDEX – deletes an index