

What Is SQL?

SQL is a special-purpose language used to define, access, and manipulate data. SQL is *nonprocedural*, meaning that it describes the necessary components (i.e., tables) and desired results without dictating exactly how those results should be computed. Every SQL implementation sits atop a *database engine*, whose job it is to interpret SQL statements and determine how the various data structures in the database should be accessed to accurately and efficiently produce the desired outcome.

The SQL language includes two distinct sets of commands: *Data Definition Language* (DDL) is the subset of SQL used to define and modify various data structures, while *Data Manipulation Language* (DML) is the subset of SQL used to access and manipulate data contained within the data structures previously defined via DDL. DDL includes numerous commands for handling such tasks as creating tables, indexes, views, and constraints, while DML is comprised of just five statements:

INSERT

Adds data to a database.

UPDATE

Modifies data in a database.

DELETE

Removes data from a database.

MERGE

Adds and/or modifies data in a database. MERGE is part of the 2003 ANSI SQL standard.

SELECT

Retrieves data from a database.

Read more at <http://www.devshed.com/c/a/Oracle/Introduction-to-SQL/#UOIdg42jKcjdmtCc.99>