**Data Manipulation Language**

Data Manipulation Language (DML) is used to handle or control data within a relational database. Often used to ***store, update, delete*** or ***alter*** data in a database.

**Basic DML commands**

* ***INSERT*** – used to input data into a table.
* ***UPDATE*** – used to make new changes to a table.
* ***DELETE*** – delete all records from database table.

**INSERT**

To insert values in a table the insert values should match the ***structure*** of the table i.e. values inserted should ***satisfy*** column data types, constraints, etc.

***Number of values*** inserted should ***equal*** the **number of columns** in table.

Syntax:

INSERT INTO table\_name (col1, col2, col3)

VALUES (value1, value2, value3);

Example:

INSERT INTO hackers (hackerName, hackerSkill, portNumber)

VALUES (‘ominousSHELL’, ‘Networking’, ‘9001’);

**UPDATE**

Used to **modify** or change an column values **found** inside a table.

Syntax:

UPDATE table\_name SET col1 = value1, col2 = value2

WHERE condition;

UPDATE hackers SET hackerName = ‘zeroDay’, portNumber = 1337

WHERE hackerID = 9001;

//To update **all** rows **remove** the WHERE clause

**Operators used in WHERE clause**

* =
* <>
* <=
* >=

We can use **AND, OR, NOT** in WHERE clauses.

Syntax:

UPDATE table\_name SET col1 = value1, col2 = value2

WHERE condition1 AND condition2;

UPDATE table\_name SET col1 = value1, col2 = value2

WHERE condition1 OR condition2;

**DELETE**

Syntax:

DELETE FROM table\_name WHERE condition;

Example:

DELETE FROM hackers WHERE hackerID=9001;

//DELETE clause will delete the **entire** row.