**OVERVIEW OF SQL STATEMENTS**

1. Data Query Language (DQL)
2. Data Definition Language (DDL)
3. Data Manipulation Language (DML)
4. Transaction Control Language (TCL)
5. Data Control Language (DCL)
6. **Data Query Language:** In SQL we have 4 statements.
7. Select
8. Projection
9. Selection
10. Join
11. **Select:** This statement is used to retrieve the data from the table and display it as a result.
12. **Projection:** The retrieval of the data by selecting only the column is known as Projection.

In Projection all the records present in the column are by default selected.

1. **Selection:** The retrieval of the data by selecting both column as well as row called as selection.
2. **Join:** The retrieval of the data from multiple tables is known as Join.

**PROJECTION**

**Syntax:**  SELECT \*/ [distinct] column name/Expression [alias]

FROM table name;

Order of execution

1. FROM
2. SELECT

1. **FROM:**

\* FROM clause starts the execution.

\* For FROM clause we can pass table name as argument.

\* FROM clause is used to go to the database, search for the table and put the table under execution.

**2 . SELECT:**

* SELECT clause executes after the execution of FROM clause.
* For SELECT clause we can pass column name, expression or asterisk (\*) as an argument.
* SELECT clause goes to the table which is under execution and selects the columns.
* SELECT clause is responsible for preparing the result table.

**NOTE:**

1. **Asterisk (\*):** means to select all the column names along with records.
2. **Semicolon:** is used to determine the end of the query/statements.

* **Asterisk (\*)** has to be used as the 1st argument and the only arguments for select clause.
* If the column name is incorrect in the select clause the error given by the compiler is “Invalid identifier”.
* If the table name is incorrect in the FROM clause the compiler gives an error “Table does not exist”**.**

**Example:** SELECT sname, percentage

FROM student;

For student table (refer class notes)

**Expression:** A statements that gives a result is known as expression.

Expression consists of 2 components.

1. OPERAND
2. OPERATOR

OPERAND can be of 2 types

1. Column name
2. Direct value/Literal