OVERVIEW OF SQL *STATEMENTS* :

1. DATA DEFINITION LANGUAGE (DDL)
2. DATA MANIPULATION LANGUAGE (DML)
3. TRANSCATION CONTROL LANGUAGE (TCL)
4. DATA CONTROL LANGUAGE (DCL)
5. DATA QUERY LANGUAGE (DQL)

DATA QUERY LANGUAGE (DQL) :

" ***DQL is used to retrieve the data from the database*** "

.It had 4 statements :

1. SELECT
2. PROJECTION
3. SELECTION
4. JOIN

1. **SELECT :** "It is used to retrieve the *data* from the table and display it.

2. **PROJECTION :** "It is a process of retrieving the data by *selecting onlythe columns* is known as Projection " .
   - In projection all the records / values present in a particular columnare by default selected .

3. **SELECTION :** "It is a process of retrieving the data by *selecting both the columns and rows* is known as Selection " .

4. **JOIN :**"It is a process of retrieving the data from *Multiple tables* simultaneously is known as Join

PROJECTION

- "It is a process of retrieving the data by *selecting only the columns* is known as Projection " .
- In projection all the records / values present in a particular column are by default selected .

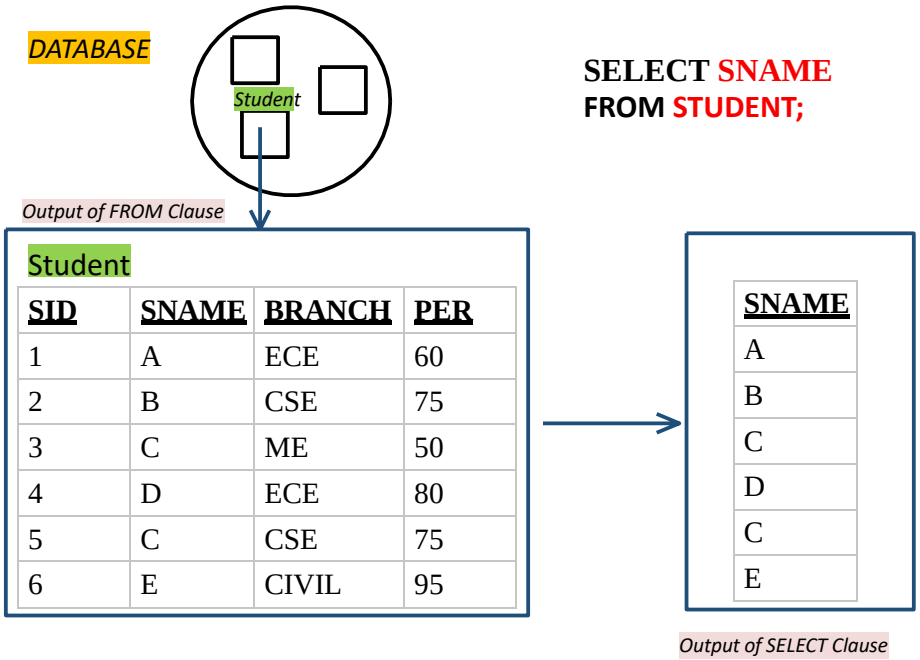
SYNTAX :

SELECT * / [DISTINCT] Column_Name / Expression [ALIAS]FROM Table_Name ;

ORDER OF EXECUTION

1. FROM Clause
2. SELECT Clause

Example : Write a query to display names of all the students.



NOTE:

- FROM Clause starts the execution.
- For FROM Clause, we can pass Table_Name as an argument.
- The job of FROM Clause is to go to the Database and search for the table and put the table under execution.
- SELECT Clause will execute after the execution of FROM Clause
- For SELECT Clause we pass 3 arguments
  - * (asterisk)
  - Column_Name
  - Expression
- The job of SELECT Clause is to go the table under execution and select the columns mentioned .
- SELECT Clause is responsible for preparing the result table.
- Asterisk (*) : it means to select all the columns from the table .
- Semicolon: it means end of the query.

- WAQTD student id and student names for all the students.

```
SELECT SID , SNAMEFROM STUDENT ;
```

- WAQTD name and branch of all the students .

```
SELECT SNAME , BRANCHFROM STUDENT ;
```

- WAQTD NAME , BRANCH AND PERCENTAGE FOR ALL THESTUDENTS .

```
SELECT SNAME , BRANCH , PER
FROM STUDENT ;
```

- WAQTD details of all the students from students table .

```
SELECT * FROM STUDENT ;
```

- WAQTD sname, sid, per, branch of all the students.

```
SELECT SNAME , SID, PER , BRANCH
FROM STUDENT ;
```

EMP Table :

EMPNO	ENAME	JOB	HIREDATE	MGR	SAL	COMM	DEPTNO
7369	SMITH	CLERK	17-DEC-80	7902	800		20
7499	ALLEN	SALESMAN	20-FEB-81	7698	1600	300	30
7521	WARD	SALESMAN	22-FEB-81	7698	1250	500	30
7566	JONES	MANAGER	02-APR-81	7839	2975		20
7654	MARTIN	SALESMAN	28-SEP-81	7698	1250	1400	30
7698	BLAKE	MANAGER	01-MAY-81	7839	2850		30
7782	CLARK	MANAGER	09-JUN-81	7839	2450		10
7788	SCOTT	ANALYST	19-APR-87	7566	3000		20
7839	KING	PRESIDENT	17-NOV-81		5000		10
7844	TURNER	SALESMAN	08-SEP-81	7698	1500	0	30
7876	ADAMS	CLERK	23-MAY-87	7788	1100		20
7900	JAMES	CLERK	03-DEC-81	7698	950		30
7902	FORD	ANALYST	03-DEC-81	7566	3000		20
7934	MILLER	CLERK	23-JAN-82	7782	1300		10

- **WAQTD name salary and commission given to all the employees .**

```
Select name , sal , comm
From emp ;
```

- **WAQTD name of the employee along with their date of joining .**

```
Select ename ,hiredate
From emp ;
```

- **WAQTD dname and location for all the depts .**

```
SELECT DNAME, LOC FROM DEPT;
```