SQL : Basic To Advance

Topics covered:-

Basics introduction

DDL(Data defination Language)

DML(Data manipulation Language)

DQL(Data Query Language)

SQL joins:- Inner join

SQL

Structured Query Language

SQL used in RDBMS (Relation Database Management System)

SQL commands:

- DDL (Data Definition Language)
- CREATE
- ALTER
- DROP
- TRUNCATE

```
CREATE TABLE table_name
(
    Column1   Data type ,
    Column2.  Constraint ,
);
```

Constraints

- Check
- Not Null
- Unique
- Primary key: Ensure that the column value in every row is unique and has no Null values
- Foreign key:
  Helps to form parent child relationship between tables. Child table references column value from parent table

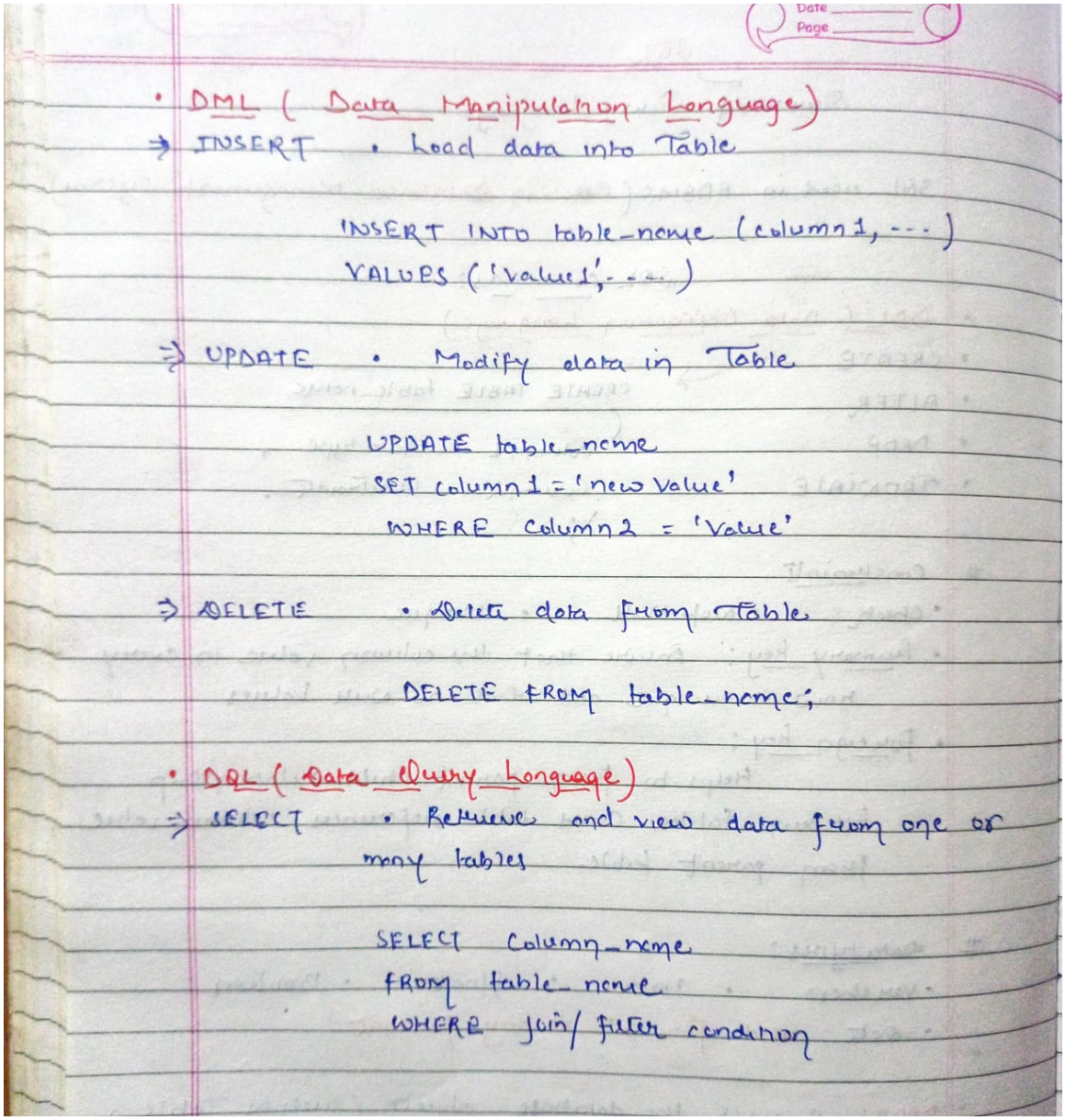
Data types:

- Varchar
- Int
- float
- Boolean
- Date: used for date in any format

- DROP: Removes the database objects (such as Table, Views, function etc.) from the database

```
DROP TABLE table_name;
DROP FUNCTION function_name;
```

- ALTER: • Modify structure of existing table
  Can be used to rename a table, column, data type etc.


Date
Page
• DML (Data Manipulation Language)
⇒ INSERT • Load data into Table
INSERT INTO table_name (column1, ...)
VALUES ('value1', ...)
⇒ UPDATE • Modify data in Table
UPDATE table_name
SET column1 = 'new value'
WHERE column2 = 'value'
⇒ DELETE • Delete data from Table
DELETE FROM table_name;
• DQL (Data Query Language)
⇒ SELECT • Retrieve and view data from one or many tables
SELECT column_name
FROM table_name
WHERE join/filter condition

SQL Joins:

INNER JOIN:

let's suppose there are 4 tables

```
select * from employee;
select * from department;
select * from manager;
select * from projects;
```

-- Fetch the employee name and the department name they belong to.

-- Inner join / JOIN } same → only records present in both tables will be fetched

```
select e.emp_name, d.dept_name
from employee e
join department d on e.dept_id = d.dept_id;
```