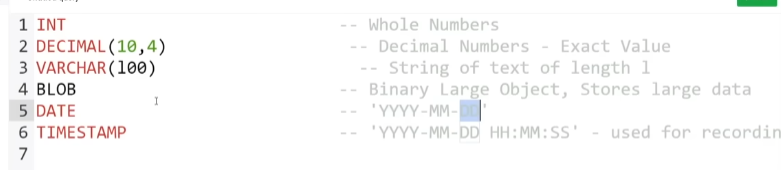
SQL



Int is the integer

Decimal –m is the total number of digits before the decimal and n is the number of digits after decimal

VARCHAR (1) :- it means it will store the string of length 1 if we have 100 there in the bracket it will store string upto length of 100

BLOB :- use to store large amount of binary data

DATE :- use to store date

TIMESTAMP :- use for recording

| **Term** | **Role** | **Used Where** |
| --- | --- | --- |
| Foreign Key | Creates relationship between tables | Any relational database |
| super\_id | Self-reference (points to same table) | Managers, professors, tasks, folders |
| branch\_id | Foreign key to another table | Banks, libraries, schools, stores, etc. |

* **branch\_id** is just a **column**.
* It **becomes a foreign key** when we **use it to link** to another table.

**Is branch\_id required to be a Primary Key?**

**Yes, in the referenced table.**  
**No, in the referencing table.**

Create database db;

Create table student(

Student\_id INT PRIMARY KEY,

Name VARCHAR(20),

Major VARCHAR(20),

);

**OR I can write it as**

Create table student(

Student\_id INT,

Name VARCHAR(20),

Major VARCHAR(20),

PRIMARY KEY(student\_id)

);

Describe table\_name :- shows the structure of a table in sql (blueprint of the table not the data inside it )

Drop table table\_name; :- deletes the table

alter table student ADD gpa decimal(2,2); :- add the new coloumn in table

alter table student drop column gpa; :- removes the mentioned column

**INSERTING DATA** :- Insert into table\_name (valuestoBeInserted);

Ex:-

INSERT INTO student VALUES(

1,"Aadrika",'Photography'

2,”Apoorva”,’Drawing'

);

Select :- to retrive data from table (it shows the data of the table)

SELECT \* FROM table\_name;

Also its different from the describe command as describe only shows the structure of the table

**CONSTRAINTS :-**

EX :-

name VARCHAR(20) NOT NULL,

major VARCHAR(20) UNIQUE

UPDATE AND DELETE :-

UPDATE student

SET major='Dance'

WHERE major='Dancing';

SELECT \* FROM student;

DELETE FROM STUDENT

WHERE student\_id=4 AND name=”Aditi”; //with condition

DELETE FROM table\_name //will delete all the rows from table

**BASIC QUERIES**

SELECT \*

FROM student;

SELECT name

FROM student;

SELECT student.major,student.name

FROM student

-- ORDER BY name desc;

ORDER BY major , student\_id;

SELECT \*

FROM STUDENT

limit 2;

SELECT \*

FROM STUDENT

WHERE student\_id<=5 AND major !='Gymnastics';

-- here IN means 'IS' i will explain select all from table\_name where name is aadrika and Abhyuday

SELECT \*

FROM student

WHERE name IN ('Aadrika','Abhyuday');

Now some more

-- we will be using this one from now

-- Step 1: Create the database

CREATE DATABASE company;

-- Step 2: Use the database

USE company;

-- Step 3: Create the employee table

CREATE TABLE employee (

employee\_id INT PRIMARY KEY,

first\_name VARCHAR(50),

last\_name VARCHAR(50),

birth\_date DATE,

sex CHAR(1),

salary DECIMAL(10, 2),

super\_id INT,

branch\_id INT

);

INSERT INTO employee (employee\_id, first\_name, last\_name, birth\_date, sex, salary, super\_id, branch\_id) VALUES

(1, 'Alice', 'Smith', '1985-06-12', 'F', 75000.00, NULL, 101),

(2, 'Bob', 'Johnson', '1990-03-28', 'M', 68000.00, 1, 102),

(3, 'Carol', 'Davis', '1982-11-02', 'F', 82000.00, 1, 101),

(4, 'David', 'Miller', '1995-07-19', 'M', 61000.00, 2, 103),

(5, 'Eva', 'Wilson', '1988-01-25', 'F', 73000.00, 1, 102),

(6, 'Frank', 'Taylor', '1993-09-10', 'M', 69000.00, 3, 101),

(7, 'Grace', 'Anderson', '1987-12-05', 'F', 77000.00, 1, 104);