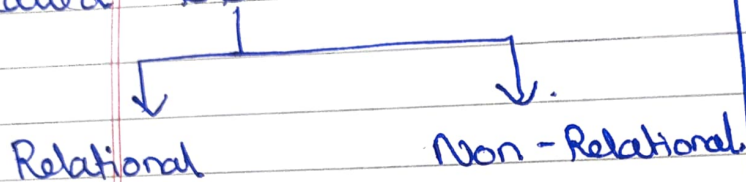


It is called Structured.
Query language.

A software application used to
manage Our DB is.
Called DBMS.



it store in
Table
SQL.

does not store
in Table
mongodb.

it create
Object.

We can use for CRUD operation.

Creating Our First Database.

CREATE DATABASE db-name;

DROP DATABASE db-name;
eg:-

```
CREATE TABLE Student(  
  id Int Primarykey,  
  name VARCHAR(50),  
  Age INT NOT NULL  
);
```

Types of SQL.

Page No.

Date

DDL (Data Definition language): Create, alter, rename, drop.

DQL (Data Query language): Select.

DML (Data Manipulation language): Select, insert, update, delete.

DCL (Data Control language) grant & revoke permission to user.

TCL (Transaction Control Language).

Start transaction, Commit, rollback.

Eg.

```
INSERT INTO table-name  
(col name 1, col name 2);  
VALUES  
(col 1-V1, col 2-V2),  
(col-V2, col2-V2);
```

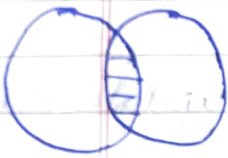
```
INSERT INTO Student  
(roll no, name)  
VALUES  
(101, "Karan"),  
(102, "arjun");
```

Primary key:- It should be Uniquely identifies each row. and not null.

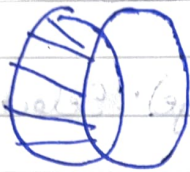
foreign key:- A foreign key is a Column in a table. refers to primary key in another table.

Joins in SQL.

Types of joins.



Inner join.



Left join



Right join



Full join

Outer join.

Inner join.

```

Select Column
From table A
Inner join table B
ON table A.col-name = table B.col-name

```

both Common name.

left join.

```

Select Column
From table A
Left Join table B
ON table A.col-name = table B.col-name

```

Same as.

Right join.

Full join

Left join
Union

Right join.

Where Clause.

Arithmetic Operator, (+, -, *, /, %).

Comparison Operator: =, !=, >, >=, <, <=

Logical Operator: AND, OR, NOT, IN, BETWEEN, ALL, LIKE, ANY.

Bitwise Operator: (AND), (OR)

Operator.

① AND. Check

↓ with both condition to be true.

Select * From Student Where marks > 80 AND City = "Mum";

② OR ⇒ either One of them.

Select * From Student Where marks > 90 OR City = "M";

③ Between ⇒ Select Given range.

Select * From Student Where marks BETWEEN 80 AND 90

④ In (matches any value in list).

Select * From Student Where City IN ("Delhi", "Mum");

⑤ NOT (to negate the Given condition).

Select * From Student Where City NOT IN (" ", " ");

① Limit clause

Select * From Student LIMIT 3;

① Order by:

To Sort. (ASC) or (DESC).

Eg:- Select * From Student
ORDER By City ASC;

① Aggregate function.

Aggregate function performs a calculation on a set of value, and return Single Value.

Count(), max(), min(), SUM(), AVG().

① Group By clause

It collect data from multiple record and group the result by One or more column.

Eg:- Select City, Count(name)
From Student
Group By City;

① Having Clause.

Used when we want to apply any condition after grouping.

Select Count (name), City

From Student.

Group By City

Having max (marks) > 90;

② General Order.

Select Column(s)

From table-name

Where Condition.

Group By Column

Having Condition

ORDER By Column ASC;

Update.

Eg

UPDATE Student

SET grade = "O"

Where grade = "A".

Delete.

Delete From Student

Where marks < 33;