KEY

KEY :-

A key is a set of **one or more attributes, which is used to uniquely identification** with in a table.

Types of Keys :-

* Super key
* Candidate key
* Primary key
* Foreign key

Super Key :-

Super key is a set of **one or more attributes that uniquely identifies** each record with in a table.

**Example:-**

* **Roll no + Name + Course + Address** is a super key.
* **Roll no** is also a super key.

Candidate Key :-

* Candidate key is a **minimal super key**, which contains **no extra attributes**.
* It consists of maximum possible attributes, which is uniquely identifies.
* Those **attribute are identified** in a table we take this attribute only. these attributes are called candidate key.

**Example :-**

* **Roll no+ ph no+ email** is a candidate key.
* **Roll no** is also a candidate key.

Primary Key :-

Primary key is an attribute, which is **uniquely identifies each record** with in a table.

Foreign Key :-

A foreign key are attributes in a table, whose value match as **primary key in another table**.

**Note:-**

* Foregin key can **contain duplicate value**.
* Also can contain **Null value**.

SQL QUERY

SELECT STATEMENT :-

This statement is used to retrieve the data from data base. If we want to retrieve two column in a table then the syntax is

**Syntax :-**

**Select column1, column2, ……. From Table name;**

Note :- If we want to retrieve all the data from the table then we use

**Syntax :-**

**Select \* from table name;**

INSERT STATEMENT :-

This statement is used to newly insert the data in a table.

Syntax :-

**Insert into table name(column1,column2,column3…..) values(value1,value2……);**

UPDATE STATEMENT :-

This statement is used to update the data from the table.

**Syntax :-**

**Update table name set column1=value1,column2=value2,… where condition;**

DELETE STATEMENT :-

This statement is used to delete the data from the table.

**Syntax :-**

**Delete from table name where condition;**

SQL JOINS

Sql joins :-

SQL JOIN means "**to combine two or more tables**". The SQL JOIN clause takes records from two or more tables in a database and combines it together. Different type of joins are

Types :-

* Inner join
* Left join
* Right join
* Full outer join
* Self join

Inner join :-

The inner join keywords select records that have matching values in both tables.

Syntax :-

**Select column name from table1 inner join table2 on table1.column name=table2.column name;**

Left join :-

Left join keyword returns all records from the left table (table1) and the matched record from the right table (table2).The result is null from the right side if there is no match.

Syntax:-

**Select column name from table1 left join table2 on table1.column name=table2.column name;**

Right join :-

Right join keyword returns all records from the right table (table2) and the matched records from the left table (table1).The result is null from the left side, when there is no match.

Syntax :-

**Select column name from table1 right join table2 on table1.column name=table2.column name;**

Full outer join :-

Full outer join keyword return all records when there is match in either left (table1) or right(table2) table records.

Syntax :-

**Select column name from table1 full outer join table2 on table1.column name=table2.column name;**

Self join :-

It is a regular join. But the table is joined with itself.

Syntax :-

**Select column name from table t1, table t2 where condition;**