**CONSTRAINTS**

**CONSTRAINTS** are the extra validations that are provided to the columns to validate the data.

Types of constraints

1. UNIQUE
2. NOT NULL
3. CHECK
4. PRIMARY KEY
5. FOREIGN KEY
6. **UNIQUE:** UNIQUE constraint is assigned to a column which should not accept duplicate values/repeated values.

**Ex:** id, Adhar card number, Phone number.

1. **NOT NULL:** NOT NULL constraint is assigned to a particular column which is mandatory.

**Ex:** id, name, percentage, YOP, DOB, AC, Phone number.

1. **CHECK:** CHECK constraint is an additional validation given to a column with a condition. If the condition is satisfied then the value is accepted else it is rejected.

**EX:** CHECK (length (phno) =10)

CHECK (length (pwd) >10)

CHECK (percentage>60)

CHECK (age>18)

1. **PRIMARY KEY:** A PRIMARY KEY constraint is used to identify a record uniquely from the table.

* We can have only one primary key in a table.
* Primary key can’t accept duplicate values.
* Primary key can’t accept NULL.
* Primary key is always a combination of UNIQUE and NOT NULL constraints.

“Primary key is not mandatory but it is recommended to have one”.

1. **FOREIGN KEY:** FOREIGN KEY constraints are used to establish a connection between 2 tables.

* We can have any number of foreign keys in a table.
* Foreign key can accept duplicate values.
* Foreign key can accept NULL.
* Foreign key constraint is not a combination of UNIQUE and NOT NULL constraints.

An attribute that is defined as primary key in a table can only become a foreign key in other table.

Foreign key is present in child table but actually belongs to parent table.

Foreign key is also known as “Referential Integrity Constraints”.

**ASSIGNMENT**

1. List the difference between primary key and foreign key.