

Constraints:

Constraints are the rule given for data validation. We have 5 types of Constraints

- i) UNIQUE
- ii) NOT NULL
- iii) CHECK
- iv) PRIMARY KEY
- v) FOREIGN KEY

UNIQUE

Unique is a constraint which is used to specify or avoid that entering or duplicate

or repeated values into the column.

NOT NULL

NOT NULL is a Constraints which is used to specify the column should not be empty or it is mandatory

NOTE: NULL

* NULL doesn't mean zero.

* NULL means nothing or Empty

* Any operation on the null results in

Null itself

* we can't equate NULL with Anything

CHECK:

CHECK is the constraints which is used for additional validation of the data

In check constraints we pass the condition. Its condition satisfy in accept the value else it reject the value

check (condition)

✓

True

✗

False

| EMP | | | | |
|-----------|-----------------|--------------|--------------------------------|-------------|
| CHECK | CHECK (sal > 0) | | CHECK (Length (phone no) = 10) | |
| NOT NULL | NOT NULL | NOT NULL | NOT NULL | NOT NULL |
| UNIQUE | UNIQUE | | UNIQUE | |
| | E ID | E NAME | E SAL | E PHONE NO |
| DATATYPES | NUMBER (3) | VARCHAR (15) | NUMBER (7, 2) | NUMBER (10) |
| | 111 | SAMEER | 25000 | 9876543210 |
| | 222 | GIRISH | 30000 | 8090458575 |
| | 333 | DIVYA | 50000 | 4575658510 |
| | 444 | MAHESWARI | 1 | 1087507081 |
| | 555 | GROWTHEN | 11100 | 8172456578 |

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PRIMARY KEY:

PRIMARY KEY is a Constraint used to identified the record uniquely from the Table

characteristics of Primary key

* we can have only one primary key in a Table

* It will not accept duplicate or repeated values.

* It will not accept NULL

* It is combination of Unique and

NOT NULL Constraints

* Primary key is NOT mandatory But highly recommended

FOREIGN KEY :

It is constraints which is used to establish connection in two tables

CHARACTERISTICS OF FOREIGN KEY :

- * We can have any number of foreign key in a Table
- * It can accept duplicate or repeated value
- * It can accept NULL
- * It is not a combination of UNIQUE and NOT NULL constraints
- * It is present in child Table But They actually belongs to parent Table

Foreign key is also known as Referential / Integrity / constraints .

Emp

| Primary key | | check (sal > 0) | CHECK (Length (ph No) = 10) | | |
|-------------|--------------|-----------------|-----------------------------|-------|------|
| | NOT NULL | NOT NULL | NOT NULL | | |
| | | | UNIQUE | | |
| E ID | ENAME | SAL | Phone-No | D: NO | C ID |
| Number (3) | VARCHAR (15) | NUMBER (7,2) | NUMBER (10) | | |
| 111 | SAMEER | 20000 | --- | 20 | 1 |
| 222 | GIRISH | 30000 | --- | 10 | 3 |
| 333 | DIVYA | 50000 | --- | 30 | 4 |
| 444 | Maheswari | 25000 | --- | 10 | 2 |
| 555 | Gautham | 10000 | --- | | |

child child

DEPT

| D: NO | D NAME | LOCATION |
|-------|---------|-----------|
| 10 | Testing | Chennai |
| 20 | Develop | Bangalore |
| 30 | Testing | Bangalore |

P.K
Parent

CUSTOMER

| C ID | C NAME | NUMBER |
|------|--------|--------|
| 1 | A | --- |
| 2 | B | --- |
| 3 | C | --- |
| 4 | D | --- |

PK

Primary key -> we not mentioned UNIQUE and NOT NULL