

## Primary key

- Uniquely identifies each row / record in a data base table
- Primary key must contains unique values
- A table can contain have only one primary key
- No duplicate values & NULL values

## Foreign Key

- Main purpose of foreign key is to ensure integrity of data.
- Allows duplicate values & Null Values

## Working with PRIMARY KEY & FOREIGN KEY CONSTRAINTS

Syntax:-

```
CREATE TABLE <TN> (C1 DATA TYPE PRIMARY KEY, C2 DATA TYPE)
```

```
CREATE TABLE <TN1> (C1 DATA TYPE , C2 DATA TYPE, C3 DATA TYPE FOREIGN KEY REFERENCES <TN>(C1))
```

Example:-

```
create table Nani (id int primary key, name varchar(20)) insert  
nani values('senorita',56), ('raj',61) ← Allowed
```

```
insert nani (name) values('hike') ← Not Allowed
```

```
create table Nani1(name varchar(10), id int foreign key references nani (id) ) insert  
nani1 values('senorita',56), ('raj',61) ← Allowed
```

```
insert nani1 (name) values('hike') ← Allowed
```

In these 2 Types Again:- With Out Cascading & with Cascading

With out cascading:-

UPDATION



Not Possible

DELETION

With Cascading:-

UPDATION



Possible

DELETION

## How to UPDATION & DELETION

```
CREATE TABLE RAJ( ID INT PRIMARY KEY, ENAME  
VARCHAR (50) )
```

```
INSERT INTO RAJ VALUES(10, 'SRK' ),(20,  
'SENORITA'),(30, 'DDLJ')
```

```
CREATE TABLE SENORITA (PHNUM BIGINT  
VARCHAR(40), LOCATION VARCHAR(40), ID INT  
FOREIGN KEY REFERENCES RAJ(ID) ON UPDATE  
CASCADE ON DELETE CASCADE)
```

```
INSERT INTO SENORITA (9876543212, 'BNGLR' ,  
10),(1234567898 , 'MNGLR', 20),(7654334565,  
'RAICHUR', 30)
```

```
SELECT * FROM RAJ
```

```
SELECT * FROM SENORITA
```

```
UPDATE RAJ SET ID = 225 WHERE ID = 10
```

```
DELETE FROM RAJ WHERE ID = 30
```

```
SELECT * FROM RAJ
```

```
SELECT * FROM SENORITA
```