#Primary Key

PRIMARY KEY

Primary key constraint uniquely identifies each record in a database. A Primary key must contain unique value and it cannot contain null value. Usually Primary key is used to index the data inside the table.

To define a field as primary key, following conditions have to be met:
a) No two rows can have the same primary key value.
b) Every row must have a primary key value.
c) The primary key field cannot be null.
d) Value in a primary key column can never be modified or updated, if any foreign key refers to that primary key.

Syntax:

```
CREATE TABLE table_name
(
column_name1 data_type(size),
column_name2 data_type(size),
column_name3 data_type(size), ....,
PRIMARY KEY (column_name)
);
```

Example 4: Working with UNIQUE constraint
Query:

```
1 CREATE TABLE employee7
2 (
3 id INTEGER,
4 name VARCHAR(20),
5 PRIMARY KEY (id)
6 );
7
8 INSERT INTO employee7 (id)  VALUES (1);
9
10 SELECT * FROM employee7;
11
12 INSERT INTO employee7 (name) VALUES ('Julia');
13
14 INSERT INTO employee7 (id, name) VALUES (1, 'Mikey');
```

Result:

Query OK, 1 row affected (0.00 sec)

id	Name
1	NULL

1 row in set (0.00 sec)
SQL Error line 12:
Column 'id' cannot be NULL
SQL Error line 14:
Duplicate entry '1' for key 'PRIMARY

Difference between primary key and unique key constraint:

S.No.	Primary Key	Unique Key
1	It doesn’t allow NULL values.	Allows NULL value. But only one NULL value.
2	By default it adds a clustered index.	By default it adds a UNIQUE non-clustered index.
3	A table can have only one PRIMARY KEY Column.	A table can have more than one UNIQUE Key Column.