UNIQUE

The UNIQUE constraint ensures that all values in a column are different. Both the UNIQUE and PRIMARY KEY constraints provide a guarantee for uniqueness for a column or set of columns. A PRIMARY KEY constraint automatically has a UNIQUE constraint.

```
CREATE TABLE contact(
    phone_number VARCHAR(15) UNIQUE
 );
```

```
mysql> SELECT * FROM CONTACT;
+--------------+
| phone_number |
+--------------+
| 12345        |
+--------------+
1 row in set (0.00 sec)

mysql> INSERT INTO contact VALUES(12345);
ERROR 1062 (23000): Duplicate entry '12345' for key 'contact.phone_number'
mysql>
```

CHECK

The CHECK constraint is used to limit the value range that can be placed in a column. If you define a CHECK constraint on a column it will allow only certain values for this column. If you define a CHECK constraint on a table it can limit the values in certain columns based on values in other columns in the row.

```
CREATE TABLE contact(
    phone_number VARCHAR(15) UNIQUE CHECK (LENGTH(phone_number) >= 10)
 );
```

```
mysql> INSERT INTO contact VALUES(1234567891);
Query OK, 1 row affected (0.01 sec)

mysql> SELECT * FROM CONTACT;
+--------------+
| phone_number |
+--------------+
| 1234567891   |
+--------------+
1 row in set (0.00 sec)

mysql> INSERT INTO contact VALUES(123456);
ERROR 3819 (HY000): Check constraint 'contact_chk_1' is violated.
mysql>
```

NAMED CONSTRAINT

```
CREATE TABLE contact(
    ph_no VARCHAR(15) UNIQUE,
    CONSTRAINT ph_no_less_than_ten_digits CHECK(Length(ph_no) >= 10)
 );
```