**NULL VALUES**

mysql> desc demo\_null;

+-------+------+------+-----+---------+-------+

| Field | Type | Null | Key | Default | Extra |

+-------+------+------+-----+---------+-------+

| id | int | YES | | NULL | |

+-------+------+------+-----+---------+-------+

1 row in set (0.22 sec)

mysql> select \* from demo\_null;

+------+

| id |

+------+

| 12 |

| 77 |

| NULL |

| 77 |

| 77 |

| 12 |

| 12 |

+------+

7 rows in set (0.16 sec)

mysql> insert into demo\_null values(589);

Query OK, 1 row affected (0.13 sec)

mysql> insert into demo\_null values();

Query OK, 1 row affected (0.07 sec)

mysql> select \* from demo\_null;

+------+

| id |

+------+

| 12 |

| 77 |

| NULL |

| 77 |

| 77 |

| 12 |

| 12 |

| 589 |

| NULL |

+------+

9 rows in set (0.00 sec)

**NOT NULL**

mysql> create table dm\_nt(id int not null);

Query OK, 0 rows affected (0.49 sec)

mysql> desc dm\_nt;

+-------+------+------+-----+---------+-------+

| Field | Type | Null | Key | Default | Extra |

+-------+------+------+-----+---------+-------+

| id | int | NO | | NULL | |

+-------+------+------+-----+---------+-------+

1 row in set (0.04 sec)

mysql> insert into dm\_nt values(589);

Query OK, 1 row affected (0.09 sec)

mysql> insert into dm\_nt values(58);

Query OK, 1 row affected (0.07 sec)

mysql> insert into dm\_nt values();

ERROR 1364 (HY000): Field 'id' doesn't have a default value

mysql> insert into dm\_nt values(58);

Query OK, 1 row affected (0.06 sec)

**UNIQUE KEY**

mysql> create table uniq1(id int unique key);

Query OK, 0 rows affected (0.38 sec)

mysql> desc uniq;

+-------+------+------+-----+---------+-------+

| Field | Type | Null | Key | Default | Extra |

+-------+------+------+-----+---------+-------+

| id | int | YES | UNI | NULL | |

+-------+------+------+-----+---------+-------+

1 row in set (0.04 sec)

mysql> insert into uniq1 values(58);

Query OK, 1 row affected (0.06 sec)

mysql> insert into uniq1 values(5);

Query OK, 1 row affected (0.04 sec)

mysql> insert into uniq1 values(5);

ERROR 1062 (23000): Duplicate entry '5' for key 'uniq1.id'

mysql> insert into uniq1 values(58);

ERROR 1062 (23000): Duplicate entry '58' for key 'uniq1.id'

mysql> insert into uniq1 values();

Query OK, 1 row affected (0.06 sec)

mysql> select \* from uniq1;

+------+

| id |

+------+

| NULL |

| 5 |

| 58 |

+------+

3 rows in set (0.03 sec)

**PRIMARY KEY**

mysql> create table dm\_prim(id int primary key);

Query OK, 0 rows affected (0.22 sec)

mysql> desc dm\_prim;

+-------+------+------+-----+---------+-------+

| Field | Type | Null | Key | Default | Extra |

+-------+------+------+-----+---------+-------+

| id | int | NO | PRI | NULL | |

+-------+------+------+-----+---------+-------+

1 row in set (0.06 sec)

mysql> insert into dm\_prim values(58);

Query OK, 1 row affected (0.08 sec)

mysql> insert into dm\_prim values(5);

Query OK, 1 row affected (0.08 sec)

mysql> insert into dm\_prim values(5);

ERROR 1062 (23000): Duplicate entry '5' for key 'dm\_prim.PRIMARY'

mysql> insert into dm\_prim values();

ERROR 1364 (HY000): Field 'id' doesn't have a default value

mysql> desc prod\_det;

+-------+--------------+------+-----+---------+-------+

| Field | Type | Null | Key | Default | Extra |

+-------+--------------+------+-----+---------+-------+

| pid | int | NO | PRI | NULL | |

| pname | varchar(25) | YES | | NULL | |

| price | double(10,2) | YES | | NULL | |

+-------+--------------+------+-----+---------+-------+

3 rows in set (0.00 sec)

mysql> select \* from prod\_det;

+-----+------------+-----------+

| pid | pname | price |

+-----+------------+-----------+

| 1 | Redmi | 32999.50 |

| 2 | Samsung DX | 15550.00 |

| 3 | Iphone | 120999.90 |

| 4 | Nokia | 13000.00 |

| 5 | Lenovo | 23555.55 |

| 6 | Real me | 12000.50 |

| 7 | Samsung | 12000.00 |

| 8 | Oppo XL | 15600.00 |

| 9 | Real NarXO | 20600.00 |

+-----+------------+-----------+

9 rows in set (0.07 sec)

mysql> desc cus\_det;

+---------+-------------+------+-----+---------+-------+

| Field | Type | Null | Key | Default | Extra |

+---------+-------------+------+-----+---------+-------+

| cid | varchar(6) | NO | PRI | NULL | |

| cname | varchar(20) | YES | | NULL | |

| address | tinytext | YES | | NULL | |

| pid | int | YES | MUL | NULL | |

+---------+-------------+------+-----+---------+-------+

4 rows in set (0.00 sec)

**Primary key & Foreign Key:**

mysql> create table dep\_det(deptid int primary key,deptname varchar(20),location varchar(20));

Query OK, 0 rows affected (0.39 sec)

mysql> desc dep\_det;

+----------+-------------+------+-----+---------+-------+

| Field | Type | Null | Key | Default | Extra |

+----------+-------------+------+-----+---------+-------+

| deptid | int | NO | PRI | NULL | |

| deptname | varchar(20) | YES | | NULL | |

| location | varchar(20) | YES | | NULL | |

+----------+-------------+------+-----+---------+-------+

3 rows in set (0.00 sec)

mysql> insert into dep\_det values(1,'HR','Bangalore');

Query OK, 1 row affected (0.07 sec)

mysql> insert into dep\_det values(2,'Development','Chennai');

Query OK, 1 row affected (0.04 sec)

mysql> insert into dep\_det values(3,'Design','Coimbatore');

Query OK, 1 row affected (0.04 sec)

mysql> insert into dep\_det values(4,'Testing','Bangalore');

Query OK, 1 row affected (0.08 sec)

mysql> select \* from dep\_det;

+--------+-------------+------------+

| deptid | deptname | location |

+--------+-------------+------------+

| 1 | HR | Bangalore |

| 2 | Development | Chennai |

| 3 | Design | Coimbatore |

| 4 | Testing | Bangalore |

+--------+-------------+------------+

4 rows in set (0.00 sec)

mysql> create table emp\_det(empid int primary key,empname varchar(25),salary double(10,2),deptid int, foreign key(deptid) references dep\_det(deptid));

Query OK, 0 rows affected, 1 warning (0.21 sec)

mysql> desc emp\_det;

+---------+--------------+------+-----+---------+-------+

| Field | Type | Null | Key | Default | Extra |

+---------+--------------+------+-----+---------+-------+

| empid | int | NO | PRI | NULL | |

| empname | varchar(25) | YES | | NULL | |

| salary | double(10,2) | YES | | NULL | |

| deptid | int | YES | MUL | NULL | |

+---------+--------------+------+-----+---------+-------+

4 rows in set (0.00 sec)

mysql> insert into emp\_det values(1001,'Vignesh',25000.50,2);

Query OK, 1 row affected (0.07 sec)

mysql> insert into emp\_det values(1021,'Hari',35550.50,3);

Query OK, 1 row affected (0.05 sec)

mysql> insert into emp\_det values(1023,'Mohan',20000.50,1);

Query OK, 1 row affected (0.02 sec)

mysql> insert into emp\_det values(1051,'Naveen',28000.50,2);

Query OK, 1 row affected (0.04 sec)

mysql> insert into emp\_det values(1015,'Deepa',18000.50,3);

Query OK, 1 row affected (0.05 sec)

mysql> insert into emp\_det values(1115,'Kumar',16000.50,4);

Query OK, 1 row affected (0.07 sec)

mysql> select \* from emp\_det;

+-------+---------+----------+--------+

| empid | empname | salary | deptid |

+-------+---------+----------+--------+

| 1001 | Vignesh | 25000.50 | 2 |

| 1015 | Deepa | 18000.50 | 3 |

| 1021 | Hari | 35550.50 | 3 |

| 1023 | Mohan | 20000.50 | 1 |

| 1051 | Naveen | 28000.50 | 2 |

| 1115 | Kumar | 16000.50 | 4 |

+-------+---------+----------+--------+

6 rows in set (0.00 sec)

mysql> select \* from dep\_det;

+--------+-------------+------------+

| deptid | deptname | location |

+--------+-------------+------------+

| 1 | HR | Bangalore |

| 2 | Development | Chennai |

| 3 | Design | Coimbatore |

| 4 | Testing | Bangalore |

+--------+-------------+------------+

4 rows in set (0.00 sec)

**Joins**

mysql> select e.empid,e.empname,d.deptname,d.location from emp\_det e inner join dept\_det d on e.deptid = d.deptid;

+-------+---------+-------------+------------+

| empid | empname | deptname | location |

+-------+---------+-------------+------------+

| 1023 | Mohan | HR | Bangalore |

| 1001 | Vignesh | Development | Chennai |

| 1051 | Naveen | Development | Chennai |

| 1015 | Deepa | Design | Coimbatore |

| 1021 | Hari | Design | Coimbatore |

| 1115 | Kumar | Testing | Bangalore |

+-------+---------+-------------+------------+

6 rows in set (0.00 sec)

mysql> select e.empid,e.empname,d.deptname,d.location from emp\_det e left join dept\_det d on e.deptid = d.deptid;

+-------+---------+-------------+------------+

| empid | empname | deptname | location |

+-------+---------+-------------+------------+

| 1001 | Vignesh | Development | Chennai |

| 1015 | Deepa | Design | Coimbatore |

| 1021 | Hari | Design | Coimbatore |

| 1023 | Mohan | HR | Bangalore |

| 1051 | Naveen | Development | Chennai |

| 1115 | Kumar | Testing | Bangalore |

+-------+---------+-------------+------------+

6 rows in set (0.00 sec)

mysql> delete from emp\_det where empid = 1115;

Query OK, 1 row affected (0.10 sec)

mysql> select e.empid,e.empname,d.deptname,d.location from emp\_det e left join dept\_det d on e.deptid = d.deptid;

+-------+---------+-------------+------------+

| empid | empname | deptname | location |

+-------+---------+-------------+------------+

| 1001 | Vignesh | Development | Chennai |

| 1015 | Deepa | Design | Coimbatore |

| 1021 | Hari | Design | Coimbatore |

| 1023 | Mohan | HR | Bangalore |

| 1051 | Naveen | Development | Chennai |

+-------+---------+-------------+------------+

5 rows in set (0.00 sec)

mysql> select e.empid,e.empname,d.deptname,d.location from emp\_det e right join dept\_det d on e.deptid = d.deptid;

+-------+---------+-------------+------------+

| empid | empname | deptname | location |

+-------+---------+-------------+------------+

| 1023 | Mohan | HR | Bangalore |

| 1001 | Vignesh | Development | Chennai |

| 1051 | Naveen | Development | Chennai |

| 1015 | Deepa | Design | Coimbatore |

| 1021 | Hari | Design | Coimbatore |

| NULL | NULL | Testing | Bangalore |

+-------+---------+-------------+------------+

6 rows in set (0.00 sec)

mysql>