1. Primaey key

mysql> use keypractices;

Database changed

mysql> create table users( userId int primary key auto\_increment, name varchar(50), age int, email var

char(20));

Query OK, 0 rows affected (0.03 sec)

mysql> desc users;

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

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

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

| userId | int | NO | PRI | NULL | auto\_increment |

| name | varchar(50) | YES | | NULL | |

| age | int | YES | | NULL | |

| email | varchar(20) | YES | | NULL | |

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

4 rows in set (0.00 sec)

2. Candidate key

mysql> create table product(p\_id int primary key auto\_increment, pname varchar(20), email varchar(20)

not null unique);

Query OK, 0 rows affected (0.03 sec)

mysql> desc product;

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

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

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

| p\_id | int | NO | PRI | NULL | auto\_increment |

| pname | varchar(20) | YES | | NULL | |

| email | varchar(20) | NO | UNI | NULL | |

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

3 rows in set (0.00 sec)

3. Foreign key

mysql> create table oders(orderId int primary key auto\_increment, email varchar(50), name varchar(50),

userId int not null, foreign key(userId) references users(userId));

Query OK, 0 rows affected (0.03 sec)

mysql> desc oders;

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

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

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

| orderId | int | NO | PRI | NULL | auto\_increment |

| email | varchar(50) | YES | | NULL | |

| name | varchar(50) | YES | | NULL | |

| userId | int | NO | MUL | NULL | |

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

4 rows in set (0.01 sec)

double foreign key

mysql> create table student\_courses(enId int primary key Auto\_increment, name varchar(20), orderId int

, userId int, foreign key(orderid) references oders(orderId), foreign key(userId) references users(use

rId));

Query OK, 0 rows affected (0.03 sec)

mysql> desc student\_courses;

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

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

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

| enId | int | NO | PRI | NULL | auto\_increment |

| name | varchar(20) | YES | | NULL | |

| orderId | int | YES | MUL | NULL | |

| userId | int | YES | MUL | NULL | |

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

4 rows in set (0.01 sec)

mysql> alter table add name varchar(50) foreign key(name

->

-> alter table student\_courses modify name varchar(50) foreign key(name) references student\_course

s(name);

ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'add name varchar(50) foreign key(name

alter table student\_courses modify name v' at line 1

4. Unique key

mysql> create table employees(emp\_id int primary key Auto\_increment, name varchar(20) unique, email varchar(20) unique key);

Query OK, 0 rows affected (0.04 sec)

mysql> desc employees;

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

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

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

| emp\_id | int | NO | PRI | NULL | auto\_increment |

| name | varchar(20) | YES | UNI | NULL | |

| email | varchar(20) | YES | UNI | NULL | |

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

3 rows in set (0.01 sec)

5. Index key

mysql> create table transaction(tran\_id int primary key auto\_increment, amount decimal(8,2) not null,

transcation\_date datetime not null, index index\_date(transcation\_date));

Query OK, 0 rows affected (0.03 sec)

mysql> desc transaction;

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

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

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

| tran\_id | int | NO | PRI | NULL | auto\_increment |

| amount | decimal(8,2) | NO | | NULL | |

| transcation\_date | datetime | NO | MUL | NULL | |

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

3 rows in set (0.01 sec)

6. Composite keys

mysql> create table invoices(invoice\_id int primary key auto\_increment, customer\_id not null, invoice\_date datetime not null, primary key(customer\_id, invoice\_id));

ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'not null, invoice\_date datetime not null, primary key(customer\_id, invoice\_id))' at line 1

mysql> create table invoices(invoice\_id int , customer\_id int not null, invoice\_date datetime not null

, primary key(customer\_id, invoice\_id));

Query OK, 0 rows affected (0.04 sec)

mysql> desc invoices;

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

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

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

| invoice\_id | int | NO | PRI | NULL | |

| customer\_id | int | NO | PRI | NULL | |

| invoice\_date | datetime | NO | | NULL | |

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

3 rows in set (0.01 sec)

7. Full\_text index:

mysql> create table articles(article\_id int primary key, title varchar(100) , content text, fulltext(t

itle, content));

Query OK, 0 rows affected (0.19 sec)

mysql> desc articles

-> ;

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

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

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

| article\_id | int | NO | PRI | NULL | |

| title | varchar(100) | YES | MUL | NULL | |

| content | text | YES | | NULL | |

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

3 rows in set (0.01 sec)

mysql>