

1、主键约束,第一种方法。

进入数据库 hoter, 然后创建数据表 customerinfo, 并将 id 设为主键。这是第一种方法。

```
mysql> use hoter;
Database changed
mysql> create table customerinfo
    -> (
    -> customerid integer primary key,
   -> customername varchar(12),
   -> customerage integer,
   -> customersex varchar(15),
   -> customerrtel varchar(15),
   -> remark varchar(200)
    -> );
Query OK, 0 rows affected (0.29 sec)
mysql> alter table customerinfo
    -> modify customersex varchar(4);
Query OK, 0 rows affected (0.15 sec)
Records: O Duplicates: O Warnings: O
mysql> desc customerinfo;
               l Type
                              | Null | Key | Default | Extra
  Field
 customerid | int(11)
                              I NO
                                       PRI I NULL
 customername | varchar(12) | YES
                                            I NULL
                                                      I
                                                              I
| customerage | int(11) | YES
                                            I NULL
                                      I
                                                      customersex | varchar(4) | YES
customerrtel | varchar(15) | YES
                                           I NULL
                                      L
                                                      I NULL
                                      I
 remark | varchar(200) | YES
                                      I NULL
                                                      I
 rows in set (0.08 sec)
```

2、主键约束,第一种方法。

在数据库 hoter 中创建了第二个数据表 customerinfo,用第二种主键设置方法。然后查 看该数据表。



```
mysql> create table customerinfo1
    -> (
    -> customerid integer,
    -> customername varchar(12),
    -> customerage integer,
    -> customersex varchar(15),
    -> customerrtel varchar(15),
    -> ramark varchar(200),
    -> primary key(customerid)
    -> );
Query OK, O rows affected (0.04 sec)
mysql> desc customerinfo;
                Type
                               | Null | Key | Default | Extra
 Field
               | int(11)
                                              NULL
 customerid
                               I NO
                                      I
                                        PRI I
 customername | varchar(12)
                               I YES
                                              NULL
                                      I
                                                       I
                                                               I
                               I YES
 customerage | int(11)
                                            I NULL
                                      I
                                                               I
 customersex | varchar(4)
                               I YES
                                            I NULL
                                      I
 customerrtel | varchar(15)
                              I YES
                                      I NULL
                                                               I
               | varchar(200)
                               I YES
                                            I NULL
 remark
                                      I
 rows in set (0.01 sec)
```

3、联合主键约束。

在数据库 hoter 中创建第三个数据表 orderinfo, 并把 customerid 和 roomid 设置为联合主

键。



mysql> create f -> (-> customer -> roomid f -> checking -> checkouf -> checkouf -> amount r -> remark (-> primary ->); Query OK, 0 roo mysql> desc org	table orderinfo rid integer, integer, date datetime, tdate datetime, numeric(7,2), varchar(200), key(customerid, ws affected (0.1 derinfo;	roomid) 5 sec)		
+ Field	-+ Type	Null #	+ Key Default	Extra
customerid roomid checkindate checkoutdate amount remark	int(11) int(11) datetime datetime decimal(7,2) varchar(200)	NO F NO F YES YES YES YES	PRI 0 PRI 0 NULL NULL NULL NULL	

4、给已经存在的数据表添加主键约束。


```
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```

```
mysgl> create table roominfo
   \rightarrow (
   \rightarrow roomid integer,
   \rightarrow roomtypeid integer,
   -> roomprice numeric(7,2),
   \rightarrow roomstate varchar(2),
   -> remark varchar(200)
   -> >:
Query OK, 0 rows affected (0.06 sec)
mysql> desc roominfo;
 Field
           : Туре
                           | Null | Key | Default | Extra |
 roomid | int(11)
                           I YES
                                        : NULL
                                                  -
                                                          roomtypeid | int(11)
                          : YES
                                  _
                                       NULL
                                                  roomprice | decimal(7,2) | YES
                                  NULL
                                                  roomstate | varchar(2) | YES
                                  I NULL
                                                  -
                                                          remark | varchar(200) | YES
                                  -
                                       : NULL
                                                  5 rows in set (0.04 sec)
mysgl> alter table roominfo
   -> add constraint pk_roominfo primary key(roomid);
Query OK, Ø rows affected (0.43 sec)
Records: Ø Duplicates: Ø Warnings: Ø
mysgl> desc roominfo;
 Field
             : Туре
                           | Null | Key | Default | Extra |
| int(11)
 roomid
                           : NO
                                  PRI I A
                                                  roomtypeid { int(11)
                          I YES
                                       : NULL
                                                  _
 roomprice { decimal(7,2) { YES
                                  : NHLL
                                                  roomstate | varchar(2)
                          I YES
                                       I NULL
remark | varchar(200) | YES
                                  : NULL
                                                  _
 rows in set (0.01 sec)
```

5、给已经存在的数据表添加联合主键约束。



mysql> alter table orderinfo -> add constraint pk_orderinfo primary key(customerid , orderid);

6、删除主键,数据库 hoter 中的其中一个数据表 customer 删除主键。

```
mysql> desc customerinfo:
                             ----+---+-----+-
              l Type
                          | Null | Key | Default | Extra |
 Field
+----
 customerid | int(11)
                          I NO
                                   | PRI | NULL
 customername | varchar(12) | YES
                                   I I NULL
                                                  I
| customerage | int(11) | YES |
| customersex | varchar(4) | YES |
                                        I NULL
                                                  I
                                                         I
                                   |
                                       I NULL
 customerrtel | varchar(15) | YES |
                                       I NULL
 remark | varchar(200) | YES | | NULL
                                                  6 rows in set (0.01 sec)
mysql> alter table customerinfo
   -> drop primary key;
Query OK, 0 rows affected (0.21 sec)
Records: 0 Duplicates: 0 Warnings: 0
mysql> desc customerinfo;
 Field | Type | Null | Key | Default | Extra |
 customerid | int(11)
                            I NO
                                        I NULL
customername | varchar(12) | YES
                                        I NULL
                                                  I
                                   I
| customerage | int(11) | YES |
| customersex | varchar(4) | YES |
                                  I NULL
                                        I NULL
 customerrtel | varchar(15) | YES |
                                        I NULL
 remark | varchar(200) | YES
                                   I NULL
6 rows in set (0.01 sec)
```

7、创建外键约束





8、删除外键

mysql> alter table customerinfo -> drop foreign key fk_roomtypeid;

9、设置默认值约束,给数据库 hoter 创建了一个数据表 orderinfo,并给 amount 设置了 默认值 0。

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<pre>mysql> create t -> (-> customer -> orderid -> checkind -> checkout -> amount n -> remark v ->); Query OK, 0 row </pre>	able orderinfo id integer, integer, ate datetime, date datetime, umeric(7,2) def archar(200) s affected (0.2 erinfo:	fault 27 se	0, c)				
# aesc of a	+	-+	+-	+-		+	F
Field	l Type	Nu	11	Key I	Default	Extra	
customerid orderid checkindate checkoutdate amount remark +	int(11) int(11) datetime datetime decimal(7,2) varchar(200) +	YE: YE: YE: YE: YE: YE:	S S S S S S	 	NULL NULL NULL O.00 NULL	 	
6 rows in set (0.08 sec)						

10、修改默认值

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mysql> desc orderinfo; Field l Type | Null | Key | Default | Extra | customerid | int(11) I YES I NULL L | int(11) | YES orderid I NULL checkindate | datetime I YES I NULL checkoutdate | datetime I YES I NULL amount | decimal(7,2) | YES 0.00 I remark | varchar(200) | YES | I NULL rows in set (0.08 sec) mysql> alter table orderinfo 🥆 -> alter amount set default 1; Query OK, 0 rows affected (0.11 sec) Records: O Duplicates: O Warnings: O mysql> desc orderinfo; -+----*----*---*----* Field l Type | Null | Key | Default | Extra customerid | int(11) I YES I NULL orderid | int(11) I YES I NULL I checkindate | datetime | YES | I NULL I checkoutdate | datetime I YES I NULL I | decimal(7,2) | YES amount L | 1.00 remark | varchar(200) | YES | I NULL rows in set (0.02 sec)

给数据库 hoter 创建了一个数据表 orderinfo,并将 amount 的默认值修改为 1。

11、删除默认值



mysql> desc orde	erinfo;	+	+				
Field +	Туре	Null +	Key +	Default	Extra +		
customerid orderid checkindate checkoutdate amount remark	int(11) int(11) datetime datetime decimal(7,2) varchar(200)	I YES I YES I YES I YES I YES I YES		NULL NULL NULL NULL 1.00 NULL			
6 rows in set (0.02 sec) mysql> alter table orderinfo → alter amount drop default; Query OK, 0 rows affected (0.06 sec) Records: 0 Duplicates: 0 Warnings: 0 musgl> desc orderinfo:							
+ Field	Туре	+ Null	+ Key	Default	Extra		
customerid orderid checkindate checkoutdate amount —— remark	int(11) int(11) datetime datetime decimal(7,2) varchar(200)	I YES I YES I YES I YES I YES I YES I YES		NULL NULL NULL NULL NULL			
			-				

将 amount 的默认值删除

12、设置非空约束





目前在数据库 hoter 中,查看数据库 hoter 中的所有数据表,然后创建一个数据表 customerinfo,并给表中的 customername 设置非空约束。

13、修改表时添加非空约束

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mysql> alter table customerinfo
 -> alter customerage not null;



14、设置检出约束——列级检查约束

```
mysgl> drop table customerinfo;
Query OK, 0 rows affected (0.05 sec)
mysql> create table customerinfo
   -> (
   -> customerid integer primary key,
   -> customername varchar(12),
   -> customerage integer check (customerage>=18),
   -> customersex varchar(4),
   -> customertel varchar(15),
   -> remark varchar(200)
   -> );
Query OK, 0 rows affected (0.11 sec)
mysql> desc customerinfo;
                               ----+
             --+---------
              l Type
 Field
                             | Null | Key | Default | Extra |
                          --+--
| customerid | int(11)
                             I NO
                                   | PRI | NULL
                                                   | customername | varchar(12) | YES
                                         I NULL
                                                   I
                                   I
                                                           I
| customerage | int(11)
                        I YES
                                         I NULL
                                   I
                                                   I
 customersex | varchar(4) | YE$
                                   I NULL
                                                   customertel | varchar(15) | YES
                                   I
                                         I NULL
                                                   remark | varchar(200) | YE$
                                         I NULL
                                                   I
                                   6 rows in set (0.02 sec)
```

```
15、设置检查约束——表级约束
```



<pre>mysql> create tabl -> (-> customerid -> customernam -> customerag -> customersex -> customertel -> remark vard -> check(custd ->); Query OK, 0 rows a mysql> desc custom</pre>	integer prim le varchar(12 ge integer, varchar(4), varchar(15) har(200), merage>=18) affected (0.0	ar), 9	y key sec)	, 					
Field T	уре	+- 	Null	+- 	Key	 	Default	Extra	l
customerid i customername u customerage i customersex u customertel u remark u	Int(11) Varchar(12) Int(11) Varchar(4) Varchar(15) Varchar(200)	+ -	NO YES YES YES YES YES	+-	PRI	+-	NULL NULL NULL NULL NULL NULL	 	

16、修改表时添加检查约束

mysql> alter table customerinfo -> add constraint chk_age check(customerage>=18);

17、设置唯一约束——第一种方法



mysql> create tab	ole customerin	fo			
-> customeric -> customerna -> customerag -> customerse -> customerse -> customerte -> remark var ->); Query OK, 0 rows musal> desc custo	d integer prim ame varchar(12 ge integer, ex varchar(4), el varchar(15) char(200) affected (0.1 omerinfo:	ary key) uniqu , 7 sec)	J, 1e,		
++-		+	++		++
Field	Туре	Null	Key	Default	Extra
customerid customername customerage customersex customertel remark +	int(11) varchar(12) int(11) varchar(4) varchar(15) varchar(200)	NO YES YES YES YES YES YES	PRI UNI 	NULL NULL NULL NULL NULL NULL	
6 rows in set (0.	.07 sec)				

18、设置唯一约束——第二种方法



```
mysql> drop table customerinfo;
Query OK, 0 rows affected (0.18 sec)
mysql> create table customerinfo
    -> (
    -> customerid integer primary key,
    -> customername varchar(12),
    -> customerage integer,
   -> customersex varchar(4),
   -> customertel varchar(15),
   -> remark varchar(200),
    -> unique(customername)
    -> );
Query OK, 0 rows affected (0.09 sec)
mysql> desc customerinfo;
              | Type | Null | Key | Default | Extra |
 Field
 customerid | int(11)
                                     I PRI I NULL
                              I NO
| customername | varchar(12) | YES
                                     | UNI | NULL
                                                     I
                                                             I
| customerage | int(11) | YES
| customersex | varchar(4) | YES
                                          I NULL
                                     I NULL
| customertel | varchar(15) | YES
                                     L
                                          I NULL
 remark | varchar(200) | YES
                                     I NULL
6 rows in set (0.01 sec)
```

19、多个列设置唯一约束——列级



<pre>mysql> create table -> (-> customerid i -> customername -> customerage -> customersex -> customertel -> remark varch ->); Query OK, 0 rows aff mysql> desc customer</pre>	customerinfo nteger primary varchar(12) u integer uniqu varchar(4), varchar(15), ar(200) ected (0.11 s info;	y key, nique, e, ec)		
Field Typ	e N	ull Key	Default	Extra
customerid int customername var customerage int customersex var customertel var remark var	(11) N char(12) Y (11) Y char(4) Y char(15) Y char(200) Y	0 PRI ES UNI ES UNI ES 1 ES 1 ES 1 ES 1	NULL NULL NULL NULL NULL NULL	+
6 rows in set (0.01	sec)			

20、多个列设置唯一约束——表级



```
mysql> drop table customerinfo;
Query OK, 0 rows affected (0.19 sec)
mysql> create table customerinfo
    ->
        (

    customerid integer primary key,

    -> customername varchar(12),
    -> customerage integer,
-> customersex varchar(4),
    -> customertel varchar(15),
-> remark varchar(200),
-> unique(customername),
    -> unique(customerage)
    -> );
Query OK, 0 rows affected (0.01 sec)
mysql> desc customerinfo;
                                    ----+----+-------
                 | Type
                             | Null | Key | Default | Extra |
  Field
| customerid | int(11)
                                 I NO
                                         | PRI | NULL
| customername | varchar(12) | YES
                                         UNI | NULL
                                                           I
| customerage | int(11)
| customerage | int(11) | YES
| customersex | varchar(4) | YES
                                 I YES
                                         | UNI | NULL
                                                           I
                                                                    I
                                         I NULL
                                                           I
 customertel | varchar(15) | YES
                                         I
                                                I NULL
                                                           I
                                                                    I
 remark
                 | varchar(200) | YES |
                                                I NULL
                                                           6 rows in set (0.01 sec)
```

21、多个列设置共同的唯一约束





22、修改表时添加一个列的唯一约束

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mysql> desc customerinfo;		+ 		++
Field Type +	Null	Key ++	Default	Extra ++
customerid int(11) customername varchar(12) customerage int(11) customersex varchar(4) customertel varchar(15) remark varchar(200)	I NO I YES I YES I YES I YES I YES		NULL NULL NULL NULL NULL NULL	
6 rows in set (0.01 sec) mysql> alter table customerinf -> add constraint uq_custo Query OK, 0 rows affected (0. Records: 0 Duplicates: 0 War mysql> desc customerinfo;	fo omerinfo 18 sec) rnings:	unique O	(customer	tel);
+ Field Type	-+ Null	++ Key ++	Default	++ Extra
customerid int(11) customername varchar(12) customerage int(11) customersex varchar(4) customertel varchar(15) remark varchar(200)	I NO I YES I YES I YES I YES I YES	PRI	NULL NULL NULL NULL NULL NULL	
++	-+	++		++

23、修改表时添加多个列的唯一约束



						_
Field	Туре	Null	Key	Default	Extra	+ +
customerid customername customerage customersex customertel remark	int(11) varchar(12) int(11) varchar(4) varchar(15) varchar(200)	NO YES YES YES YES YES		NULL NULL NULL NULL NULL NULL		+
6 rows in set ((0.01 sec)		+			Ŧ
mysql> alter tak -> add cons ERROR 1064 (4200 corresponds to y mername)' at lin mysql> alter ta -> add con Query OK, 0 rows Records: 0 Dupl mysql> desc cust	ole customerinfo straint uq_custo 00): You have ar your MySQL serve he 2 able customerinf nstraint uq_cust s affected (0.11 licates: 0 Warr tomerinfo;	o omerinf er vers Fo tomerin I sec) nings:	o uniqu in you ion for fo uniq 0	e(customen n SQL synf the right ue(custome	rtel cus tax; chec t syntax ertel, cu	tomername); ck the manual th to use near 'cu ustomername);
+ Field	 I Туре	 Null	++ Key	Default	Extra	+ !
customerid customername customerage customersex customertel remark	int(11) varchar(12) int(11) varchar(4) varchar(15) varchar(200)	I NO I YES I YES I YES I YES I YES	++ PRI MUL 	NULL NULL NULL NULL NULL NULL		+
+6 rows in set (0	9.01 sec)		++		+	+

24、删除唯一约束



mysql> desc cus	tomerinfo;		- +
Field	Type	Null Key Default Extra	Ì
customerid customername customerage customersex customertel remark	int(11) varchar(12) int(11) varchar(4) varchar(15) varchar(200)	NO PRI NULL YES NULL YES NULL YES NULL YES UNI NULL YES NULL	
6 rows in set (mysql> drop ind Query OK, 0 row Records: 0 Dup mysql> desc cus	0.01 sec) lex uq_customeri is affected (0.1 plicates: 0 War stomerinfo;	nfo on customerinfo; 3 sec) nings: 0	
Field	+ Туре	Null Key Default Extra	
customerid customername customerage customersex customertel remark	int(11) varchar(12) int(11) varchar(4) varchar(15) varchar(200)	I NO I PRI I NULL I I YES I I I NULL I I YES I I I NULL I	
6 rows in set (0.01 sec)		