

## Data Definition Language

建表-改表-删表

建议用GUI，需要SQL的话直接导出

### 1. 主键

#### a. 自增

### 2. 联合主键

#### a. SC表

```
create table SC
(
SNO int,
CNO int,
SCGRADE int,
primary key (SNO, CNO)
)
```

`primary key (SNO, CNO)`

### 3. 数据类型

a. <https://dev.mysql.com/doc/refman/5.7/en/data-types.html>

b. <https://www.runoob.com/mysql/mysql-data-types.html>

### 4. 非空约束

### 5. 唯一约束

### 6. 默认值

### 7. 外键约束

#没有加主键外键约束的表

```
create table student
(
id tinyint,
name varchar(20) not null,
sex tinyint,
age smallint,
sdate date,
grade tinyint default 1,
`class` tinyint,
email varchar(50)
);
```

#自增主键

```
drop table student;
create table student
(
id tinyint primary key auto_increment,
name varchar(20) not null,
sex tinyint,
age smallint,
sdate date,
grade tinyint default 1,
class tinyint,
email varchar(50) unique
);
```

#自增主键在insert语句中不允许插入，由数据库自动插入

```
insert into student values
(null, 'zhangsan', 1, 15, curdate(), 3, 40, 'zhangsan@mashibing.com');
```

#指定自增初始值

```
create table student
(
id int primary key auto_increment,
name varchar(20) not null,
sex tinyint,
age smallint,
sdate date,
grade tinyint default 1,
class tinyint,
email varchar(50)
) auto_increment = 100;
```

#创建班级表

```
create table `class`
(
id int primary key auto_increment,
cname varchar(20)
)
```

#外键约束

```
drop table student;
create table student
(
id int primary key auto_increment,
name varchar(20) not null,
```

```
sex tinyint,  
age smallint,  
sdate date,  
grade tinyint default 1,  
class int,  
email varchar(50),  
FOREIGN KEY fk_class(class) REFERENCES `class`(id)
```

```
) auto_increment = 100;
```

#测试外键约束

```
insert into student values
```

```
(null, 'zhangsan', 1, 15, curdate(), 3, 40, 'zhangsan@mashibing.com');
```

```
FOREIGN KEY fk_class(class) REFERENCES `class`(id)
```

删除表:

```
drop table XXX;
```