

# 数据库的分类:(DDL,DML,DQL,DCL,)

## 一. DML数据操作语言(增删改)

### 1. 查看表中的数据

```
1 select *from student;
```

### 2. 添加数据

#### insert into 表名 values (值1,值2....)

```
1 insert into 表名 values (值1,值2....)
2 insert into student values (null , '张三', '男', '11111111111');
```

1 数据要和字段要求相匹配

```
2 insert into student values (null , 'null', '男', '11111111111');
```

1 数据要和字段顺序相匹配

```
2 insert into student values (null , '男', '张三', '1111111111888');
```

```
1 insert into 表名 (字段1,字段2,...)values (值1,值2,...)
2 insert into student(name, age, phone)values ( '王麻子', '女', '1999933344445');
```

#### 快捷键: ins

```
1 insert into student (name, age, phone)
2 values ( '司机', '男', '未知');
```

### 3. 把一个表的数据导入到另一张表中

```
1 insert into people select *from student;
```

1 添加多个人的信息是否存在:(如下)

```
1 # insert into 表名
2 # select 值1,值2,...
3 # union all
4 # select 值1,值2,...
5 # union all
6 # select 值1,值2,...
```

```
1 insert into student
2 select null , '哪吒', '女', '666'
3 union all
```

```
4 select null , '匹诺曹', '男', '999';
```

#### 4. 修改(通过ID)

update 表名 set 字段1=值1, 字段2=值2, ... where 主键=值

```
1  
2 update people  
3 set name='张三',  
4 age='男'  
5 where id=109;
```

#### 5. 删除(通过ID)

```
1 delete from 表名 where 主键=值;  
2 delete from people where id=100;
```

## 二. DQL (查询)

### 1. select

字段1, 字段2, ....

from 表1, 表2, ....

where 条件1, and/or 条件2 and/or ...

### 2. group by 字段

having 条件1 and/or 条件2 and/or ...

order by 字段1, 字段2, ...

### 3. limit m, n

#### 注释

```
1 -- 注释  
2 /*  
3 注释  
4 */
```

查询所有学生的姓名电话

```
1 select name, phone from student;
```

统计学生的性别

```
1 select distinct age from student;
```

## 查询学生的所有信息,\*代表所有字段

```
1 select * from student;
```

## 4. 段别名

```
1 select name,age from student;
2 select name as '姓名',age as '性别'from student;
3 select name '姓名',age '性别'from student;
4 select name n ,age m from student;
5 # as可以省略
```

## 5. 聚合函数

```
1 count(字段),计算不为空的字段数量
2 select count(*) from student;
3 select count(id) from student;
4 select count(age) from student;
```

## max(字段),获取字段的最大值

```
1 select max(age1) from student;
2 select min(age1) from student;
3 select sum(age1) from student;
4 select avg(age1) from student;

1 查询所有女同学
2 select * from student where age = '女';
3
4 select * from student where age1 >=18;
5 select * from student where age1 <=18;
6 select * from student where age1 =18;
7 #不等于
8 select * from student where age1 !=18;
9 select * from student where age1 <>18;
10
11 select * from student where age1 >18;
12 select * from student where age1 >18;
13
14 select *from student where name='张三';
15 select *from student where name like '张三';
16 #模糊查找
17 #代表一个字符
18 select *from student where name like '_三';
```

```
19 #代表多个字符
20 select *from student where name like '%三';
21 select *from student where age like '女';
```

```
1 select *
2 from student where age1>=18 and age='女';
3
4 select *from student where age1>=18 or age='女';
5
6 年龄为18,19,21的男同学
7 select *from student where age1=18 or age1=19 or age1=21;
8 select *from student where age1 in(18,19,21);
9
10 select *from student where age1 >=18 and age1<=20;
11 select *from student where age1 between 18 and 20;
12 select *from student where age1 not between 18 and 20;
13 select *from student where age is null ;
```

## 6. group by

```
1 select age ,count(*) from student group by age;
```

### 统计男和女的人数

```
1 select age ,count(*)
2 from student
3 where age='男'or age='女'
4 group by age;
```

### 对分组后的内容进行筛选

```
1 select age ,count(*)
2 from student
3 group by age
4 having age='男'or age='女';
```

### 获取分组人数大于5人的分组

```
1 select age
2 from student
3 where age='男'or age='女'
4 having count(*)>=5;
```

## 7. order by排序

```
1 select *
2 from student
3 order by age1;
```

## asc升序

```
1 select *
2 from student
3 order by age1 asc ;
```

## desc 降续

```
1 select *
2 from student
3 order by age1 desc;
```

```
1 select *
2 from student
3 order by age1 desc ,id asc ;
```

## 8. limit

```
1 #前5条
2 select *from student limit 5;
```

## 从第6行开始取两行

```
1 select *from student limit 5,2;
```

## 分页

```
1 -- 1
2 select *from student limit 0,5;
3 -- 2
4 select *from student limit 5,5;
5 -- 3
6 select *from student limit 10,5;
7 -- 每一页为count,第n页的数据
8 #select * from student limit (n-1)*count,count;
```