

计算机科学与技术学院 数据库系统 课程实验报告

实验题目：复制表，删除数据		学号：201600301291
日期：2019/4/1	班级：泰山学堂	姓名：王文嵩
<p>实验目的：</p> <p>练习复制表操作，对数据中不符合要求的进行筛选及删除操作</p>		
<p>实验软件和硬件环境：</p> <p>Windows10 操作系统，实验提供的数据库操作平台</p>		
<p>实验原理和方法：</p> <p>复制表 <code>create table test3_01 as select * from tablename</code> 删除数据 <code>delete from tablename where condition</code> 常用的筛选操作 <code>like '% %'</code> 字符匹配 <code>Substr(sid,1,1)</code> 截取字符或字符串 <code>Extract(year from birthday)</code> 返回 birthday 的年份 <code>Length(name)</code> 求长度函数 删除表 <code>drop table</code></p>		
<p>实验步骤：（不要求罗列完整源代码）</p> <p>1. 题目分析 首先执行 复制表操作 <code>Create table test3_01 as</code> <code>Select * from pub.student_31</code> 删除学号中的错误数据 <code>Delete from test3_01</code> <code>Where Length(name)<>12</code> <code>Substr(name,1,1) not between '0' and</code> <code>'9'</code> <code>create table test3_01 as</code> <code>select *</code> <code>from pub.student_31</code> <code>delete from test3_01</code> <code>where substr(sid,1,1) not between '0' and '9'</code></p>		

```
or substr(sid,2,1) not between '0' and '9'
or substr(sid,3,1) not between '0' and '9'
or substr(sid,4,1) not between '0' and '9'
or substr(sid,5,1) not between '0' and '9'
or substr(sid,6,1) not between '0' and '9'
or substr(sid,7,1) not between '0' and '9'
or substr(sid,8,1) not between '0' and '9'
or substr(sid,9,1) not between '0' and '9'
or substr(sid,10,1) not between '0' and '9'
or substr(sid,11,1) not between '0' and '9'
or substr(sid,12,1) not between '0' and '9'
```

```
create table test3_02 as
  select *
  from pub.student_31
delete from test3_02
  where (2012-extract(year from birthday))<>age
```

```
create table test3_03 as
  select *
  from pub.student_31
delete from test3_03
  where sex<>'男'
  and sex<>'女'
  and sex is not null
```

```
create table test3_04 as
  select *
  from pub.student_31
delete from test3_04
  where dname like '% %' or length(dname)<3 or dname is null
```

```
create table test3_05 as
  select *
  from pub.student_31
delete from test3_05
  where length(class)<>4 or substr(class,1,4) not between '2004' and
'2011'
```

```
create table test3_06 as
  select *
  from pub.student_31
```

```

delete from test3_06
  where substr(sid,1,1) not between '0' and '9'
  or substr(sid,2,1) not between '0' and '9'
  or substr(sid,3,1) not between '0' and '9'
  or substr(sid,4,1) not between '0' and '9'
  or substr(sid,5,1) not between '0' and '9'
  or substr(sid,6,1) not between '0' and '9'
  or substr(sid,7,1) not between '0' and '9'
  or substr(sid,8,1) not between '0' and '9'
  or substr(sid,9,1) not between '0' and '9'
  or substr(sid,10,1) not between '0' and '9'
  or substr(sid,11,1) not between '0' and '9'
  or substr(sid,12,1) not between '0' and '9'
  or (2012-extract(year from birthday))<>age
  or name like '% %' or length(name)<2
  or dname like '% %' or length(dname)<3 or dname is null
or sex<>'男'
  and sex<>'女'
  and sex is not null
  or length(class)<>4

create table test3_07 as
  select *
  from pub.student_course_32
delete from test3_07
  where sid not in(select sid
                    from pub.student)

create table test3_08 as
  select *
  from pub.student_course_32
delete from test3_08
  where (cid,tid) not in(select s.cid,s.tid
                        pub.teacher_course s)

create table test3_09 as
  select *
  from pub.student_course_32
delete from test3_09
  where score<0 or score>100

create table test3_10 as
  select *

```

```
from pub.student_course_32
```

```
delete from test3_10
```

```
where sid not in (select sid from pub.STUDENT) or cid not in(select  
cid from pub.course) or tid not in(select tid from pub.teacher)  
or score<0 or score >100 or (cid,tid ) not in(select cid,tid from  
pub.TEACHER_COURSE )
```

结论分析与体会：

进行对数据的删除操作时，一定要将数据复制到新表中在进行操作，以免丢失数据，对数据的筛选时要考虑到各种不符合情况，例如数字中含有的字符，空值等等，有时还需要对数据进行分析从而找出与大多数数据不一样的数据