

## 计算机学院 数据库系统 课程实验报告

实验题目：检索查询		学号：201600301291
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<p>实验目的：</p> <p>熟悉各种查询语句，熟练使用 select from where group by having 子句以及 count max substring 等函数</p>		
<p>实验软件和硬件环境：</p> <p>Windows10 Oracle 数据库</p>		
<p>实验原理和方法：</p> <p>查询本人有那些表 select * from tab</p> <p>查询实验大纲下公共用户有哪些表 select * from all_tables where owner=' pub'</p> <p>查询一个表中所有数据 Select * from pub.student</p> <p>将查询结果创建到对应的表中 Create table tableName as select...</p>		
<p>实验步骤：（不要求罗列完整源代码）</p> <ol style="list-style-type: none"><li>1. 登录系统</li><li>2. 针对实验要求的 10 个题目，进行对应的查询，并将结果创建到对应的表中</li><li>3. 执行 update dbtest set test =2 验证结果</li><li>4. 执行 select * from dbscore 查询结果</li><li>5. 如出现错误，执行 drop table tableName 删除数据表，重新进行查询</li></ol> <p>代码如下</p> <pre>create table test2_01 as select sid,name from pub.student where sid in (select sid from pub.STUDENT minus select sid from pub.STUDENT_COURSE)</pre>		

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create table test2_02
  as select sid ,name from pub.student
  where sid in(select sid from pub.student_course where cid in
    (select cid from pub.student_course where sid=200900130417))

create table test2_03 as
  select sid ,name from pub.student
  where sid in (select sid from pub.student_course
    where cid in(select cid
      from pub.course where fcid=300002))

create table test2_04 as
  select sid ,name from pub.student
  where sid in (select c1.sid
    from pub.student_course c1, pub.student_course c2
    where c1.CID=(select cid
      from pub.course where name=' 操作系统')
      and c2.CID=(select cid
        from pub.course where name=' 数据结构')
      and c1.sid=c2.sid );

create table test2_05 as
  select sid,name,avg_score,sum_score from pub.STUDENT natural join(
  select sid,round(avg(score)) as avg_score,sum(score) as sum_score  from
pub.STUDENT_course
  where sid in
  (Select sid  from pub.student where age=20) group by sid)

create          table          test2_06          as          (select
cid,name,max_score,max_score2,count(distinct ) as max_score_count
  from (select cid,name, max(score) as max_score
  from pub.student_course natural full outer join pub.COURSE
  group by cid,name
  )
  natural full outer join pub.STUDENT_COURSE
  natural full outer join  (select cid ,max(score) as max_score2
  from (select cid,name, max(score) as max_score
  from pub.student_course natural full outer join pub.COURSE
  group by cid,name
  ) natural full outer join pub.STUDENT_COURSE where  score<>max_score or
score is null
  group by cid)

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where score=max_score group by cid,name,max_score,max_score2)

create table test2_07 as
  select sid,name
  from pub.student
  where name not like '张%' and name not like '李%'
        and name not like '王%'

create table test2_08 as
  select substr(name,1,1) second_name,count(name) p_count
  from pub.student
  group by substr(name,1,1)

create table test2_09 as
  select sid,name,score
  from pub.student natural join pub.student_course
  where cid='300003'

create table test2_10 as
  select sid,name
  from pub.student_course natural join pub.student
  where score<60
  group by cid,sid,name
  having count(sid)>=2
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### 结论分析与体会：

要熟练使用查询语句，及 having group by, 使用 sql 中函数库可以大大提高查询效率，最后要考虑查询语句的易读性，简洁性

进行数据操作须小心谨慎，注意细节。 进行数据操作须小心谨慎，注意细节。 进行数据操作须小心谨慎，注意细节。

了解 select 语句各字句的执行顺序,比如 where 语句中的限制条件是可以对 group by 起作用的

就实验过程中遇到和出现的问题，你是如何解决和处理的，自拟 1—3 道问答题：

第六题需要仔细思考，有很多需要注意的地方，例如一个同学同一门课得最高分只算一次。