**西南财经大学《数据库原理》实验报告**

**2024 年 5 月 13 日**

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| **实验题目** | | **数据库编程实验** | | |
| **选课课号** | |  | | |
| **学 院** | | **经济信息工程学院** | **班 级** | **数字经济一班** |
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| **实验的详细操作步骤：**  1.统计任意课程的成绩分布，即按照各分数段统计人数，创建存储过程如下：  create proc proc\_cal\_distribution @Course nvarchar(20)  as  begin  select case  when Grade between 0 and 59 then '0-59'  when Grade between 60 and 69 then '60-69'  when Grade between 70 and 79 then '70-79'  when Grade between 80 and 89 then '80-89'  when Grade between 90 and 100 then '90-100'  end  as '分数段',  count(Grade) as '人数'  from SC  inner join Course on SC.Cno = Course.Cno  where Cname = @Course  group by case  when Grade between 0 and 59 then '0-59'  when Grade between 60 and 69 then '60-69'  when Grade between 70 and 79 then '70-79'  when Grade between 80 and 89 then '80-89'  when Grade between 90 and 100 then '90-100'  end  end  go  执行该存储过程（以数据结构为例）结果如下：  exec proc\_cal\_distribution N'数据结构' a01e2da4b4f50cf9ceb66aba5bf8bf2  2.统计任意一门课程的平均成绩，创建存储过程如下：  create proc proc\_cal\_average @Course nvarchar(20), @score smallint output  as  select @score = avg(Grade)  from SC  where Cno = (select Cno from Course where Cname = @Course)  go 执行该存储过程（以程序设计基础与C语言为例）结果如下：  declare @average smallint  declare @target\_course nvarchar(20) = N'程序设计基础与C语言'  exec proc\_cal\_average @target\_course,  @average output  print @target\_course + N'的平均分为：' + cast(@average as nvarchar(5))  96b309a547263bfd7935d008b15b456  3.百分制转换为等级制，创建存储过程如下：  create proc proc\_score\_to\_level  as  select student.Sno,  Sname,  Cname,  Grade,  case  when Grade >= 90 then 'A'  when Grade >= 80 then 'B'  when Grade >= 70 then 'C'  when Grade >= 60 then 'D'  else 'E'  end  from SC  inner join student on SC.Sno = student.Sno  inner join Course on SC.Cno = Course.Cno  go  执行该存储过程结果如下：  exec proc\_score\_to\_level  06acce4291ff3d36d992de3c0529787 | | | | |
| **教师评语** |  | | | |
| **成 绩** |  | | | |