基于 GaussDB 的 SQL 查询练习实验

姓名：___汤清云___ 学号：___2013536___

实验步骤：

➢ 登录华为云 IAM 用户

➢ 访问对应数据库

➢ 进行相关数据查询

实验报告

实验步骤：

1.给出职工中所有男性的所有信息（empid,empname,age,sex,edpid）

Select * from employee where sex= '男'；

2.统计"李"性职工信息，按年龄降序排序。(empid,empname,age,location)

SELECT empid ,empname ,age,location from employee,department

WHERE employee.depid =department.depid and employee.empname

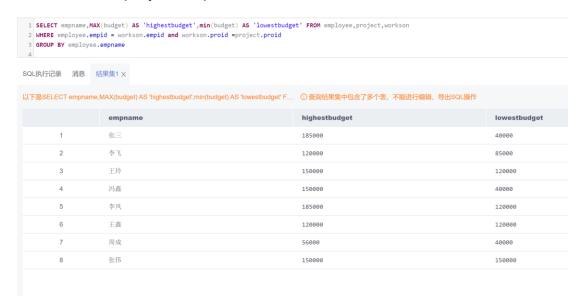LIKE '李%' ORDER BY employee.age DESC

```
1 SELECT empid ,empname ,age,location  from employee,department  WHERE employee.depid =department.depid and employee.empname LIKE '李%' ORDER BY employee.age DESC
```

SQL执行记录　消息　结果集1 ×　　　　　　　　　　　　　　　　　　　　　　　　　　　　　　　　　　　　覆盖模式 ⊙

以下是SELECT empid ,empname ,age,location from employee,department WHERE employe...　① 查询结果集中包含了多个表，不能进行编辑、导出SQL操作　　复制行　复制列 ∨　列设置 ∨

	empid	empname	age	location
1	28559	李凤	41	广州
2	10211	李飞	24	北京

3. 给出每位职员参与项目的最高预算和最低预算 (empname，highestbudget，lowestbudget)

SELECT empname,MAX(budget) AS 'highestbudget',min(budget) AS 'lowestbudget' FROM employee,project,workson

WHERE employee.empid = workson.empid and workson.proid =project.proid

GROUP BY employee.empname

```
1 SELECT empname,MAX(budget) AS 'highestbudget',min(budget) AS 'lowestbudget' FROM employee,project,workson
2 WHERE employee.empid = workson.empid and workson.proid =project.proid
3 GROUP BY employee.empname
4
```
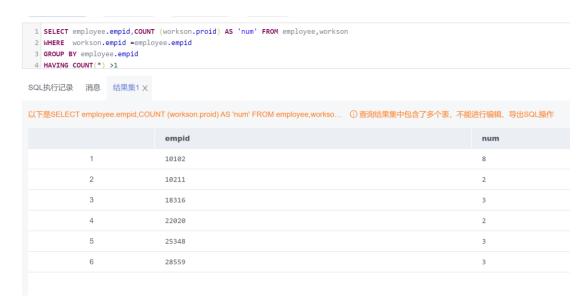
SQL执行记录　消息　结果集1 ×

以下是SELECT empname,MAX(budget) AS 'highestbudget',min(budget) AS 'lowestbudget' F...　① 查询结果集中包含了多个表，不能进行编辑、导出SQL操作

	empname	highestbudget	lowestbudget
1	张三	185000	40000
2	李飞	120000	85000
3	王玲	150000	120000
4	冯鑫	150000	40000
5	李凤	185000	120000
6	王鑫	120000	120000
7	周成	56000	40000
8	张伟	150000	150000

4.给出所有项目超过一个的员工的 id 和参加的项目个数（empid, num）

SELECT employee.empid,COUNT （workson.proid） AS 'num' FROM employee,workson

WHERE workson.empid =employee.empid

GROUP BY employee.empid

HAVING COUNT(*) >1

```
1  SELECT employee.empid,COUNT (workson.proid) AS 'num' FROM employee,workson
2  WHERE  workson.empid =employee.empid
3  GROUP BY employee.empid
4  HAVING COUNT(*) >1
```

SQL执行记录　消息　结果集1 ×

以下是SELECT employee.empid,COUNT (workson.proid) AS 'num' FROM employee,workso...　ⓘ 查询结果集中包含了多个表，不能进行编辑、导出SQL操作

	empid	num
1	10102	8
2	10211	2
3	18316	3
4	22020	2
5	25348	3
6	28559	3

5.给出项目种类号为"c2"且预算最多的项目。(proid, projectname, budget)

SELECT proid,projectname,budget FROM project

WHERE catid ='c2' AND budget >=ALL (SELECT budget FROM project

WHERE catid ='c2');

```
1  SELECT proid,projectname,budget FROM project
2  WHERE catid ='c2' AND budget >=ALL (SELECT budget FROM project WHERE catid ='c2')
3  |
```

SQL执行记录　消息　结果集1 ×

以下是SELECT proid,projectname,budget FROM project WHERE catid ='c2' AND budget >=...　ⓘ 点击单元格可编辑数据，新增或编辑后需要提交编辑以保存

	proid	projectname	budget
1	p4	服务器采购	150000

6. 给出参加"产品推广"项目，但不担任职位的员工的员工信息，(empid,empname，age,sex.depid)

SELECT

employee.empid ,employee.empname,employee.age,
employee.sex ,employee.depid　FROM
employee,workson,project

WHERE employee.empid =workson.empid AND workson.job IS NULL AND workson.proid =project.proid AND project.projectname ='产品推广'

```
1  SELECT employee.empid ,employee.empname,employee.age,employee.sex ,employee.depid  FROM employee,workson,project
2  WHERE employee.empid =workson.empid AND workson.job IS NULL AND workson.proid =project.proid AND project.projectname ='产品推广'
3
```

SQL执行记录   消息   结果集1 ✕

以下是SELECT employee.empid ,employee.empname,employee.age,employee.sex ,employ... ⓘ 点击单元格可编辑数据，新增或编辑后需要提交编辑以保存   复制行 复制列

	empid	empname	age	sex	depid
1	25348	冯鑫	27	男	d1

7. 给出工号为"10102"的员工每类项目的参加总数，若没有参加过某类项目，则参加项目总数显示为0（catid，proNum）

SELECT project.catid ,COUNT (DISTINCT   project.proid) AS 'proNum'

FROM workson,project

WHERE workson.empid ='10102'

GROUP BY project.catid ;

```
1  SELECT project.catid ,COUNT (DISTINCT  project.proid ) AS 'proNum' FROM workson,project
2  WHERE workson.empid ='10102'
3  GROUP BY project.catid ;
```

SQL执行记录   消息   结果集1 ✕

以下是SELECT project.catid ,COUNT (DISTINCT project.proid) AS 'proNum' FROM workso.... ⓘ 查询结果集中包含了多个表，不能进行编辑、导出SQL操作

	catid	proNum
1	c1	1
2	c2	3
3	c3	1
4	c4	2
5	c5	1

8. 给出没有参与"软件类"项目女性职工的信息（empid,empname,age,sex,depid）

SELECT * FROM employee

WHERE sex ='女' AND empid NOT IN

(SELECT empid FROM workson WHERE workson.proid IN

 (SELECT proid FROM project WHERE project.catid ='c4')

)

9. 给出有 30 岁以上男性员工的省份名称和该省男员工最大年龄，结果按最大年龄升序排序.

SELECT department.location,MAX(employee.age) AS 'maxAge' FROM

department,employee

WHERE employee.sex ='男' AND employee.depid =department.depid

AND   department.depid IN

(SELECT depid FROM employee WHERE age >30)

GROUP BY department.depid

10. 给出在广州工作的、参加"'产品推广'"项目的职员 id、姓名及他们参加的项目个数（empid, empname, procnt）

SELECT employee.empid ,employee.empname ,COUNT (*)　FROM employee,workson WHERE employee.empid IN

(SELECT employee.empid FROM employee,workson,project

WHERE employee.depid IN (SELECT depid FROM department WHERE location ='广州')

AND workson.proid IN (SELECT project.proid FROM project WHERE projectname ='产品推广')

AND employee.empid =workson.empid

AND workson.proid =project.proid

)

AND employee.empid =workson.empid

	empid	empname	COUNT(*)
1	28559	李凤	3