Mysql -Day02

====================db4

-- 部门表

CREATE TABLE dept (

id INT PRIMARY KEY PRIMARY KEY, -- 部门id

dname VARCHAR(50), -- 部门名称

loc VARCHAR(50) -- 部门所在地

);

-- 添加4个部门

INSERT INTO dept(id,dname,loc) VALUES

(10,'教研部','北京'),

(20,'学工部','上海'),

(30,'销售部','广州'),

(40,'财务部','深圳');

-- 职务表，职务名称，职务描述

CREATE TABLE job (

id INT PRIMARY KEY,

jname VARCHAR(20),

description VARCHAR(50)

);

-- 添加4个职务

INSERT INTO job (id, jname, description) VALUES

(1, '董事长', '管理整个公司，接单'),

(2, '经理', '管理部门员工'),

(3, '销售员', '向客人推销产品'),

(4, '文员', '使用办公软件');

-- 员工表

CREATE TABLE emp (

id INT PRIMARY KEY, -- 员工id

ename VARCHAR(50), -- 员工姓名

job\_id INT, -- 职务id

mgr INT , -- 上级领导

joindate DATE, -- 入职日期

salary DECIMAL(7,2), -- 工资

bonus DECIMAL(7,2), -- 奖金

dept\_id INT, -- 所在部门编号

CONSTRAINT emp\_jobid\_ref\_job\_id\_fk FOREIGN KEY (job\_id) REFERENCES job (id),

CONSTRAINT emp\_deptid\_ref\_dept\_id\_fk FOREIGN KEY (dept\_id) REFERENCES dept (id)

);

-- 添加员工

INSERT INTO emp(id,ename,job\_id,mgr,joindate,salary,bonus,dept\_id) VALUES

(1001,'孙悟空',4,1004,'2000-12-17','8000.00',NULL,20),

(1002,'卢俊义',3,1006,'2001-02-20','16000.00','3000.00',30),

(1003,'林冲',3,1006,'2001-02-22','12500.00','5000.00',30),

(1004,'唐僧',2,1009,'2001-04-02','29750.00',NULL,20),

(1005,'李逵',4,1006,'2001-09-28','12500.00','14000.00',30),

(1006,'宋江',2,1009,'2001-05-01','28500.00',NULL,30),

(1007,'刘备',2,1009,'2001-09-01','24500.00',NULL,10),

(1008,'猪八戒',4,1004,'2007-04-19','30000.00',NULL,20),

(1009,'罗贯中',1,NULL,'2001-11-17','50000.00',NULL,10),

(1010,'吴用',3,1006,'2001-09-08','15000.00','0.00',30),

(1011,'沙僧',4,1004,'2007-05-23','11000.00',NULL,20),

(1012,'李逵',4,1006,'2001-12-03','9500.00',NULL,30),

(1013,'小白龙',4,1004,'2001-12-03','30000.00',NULL,20),

(1014,'关羽',4,1007,'2002-01-23','13000.00',NULL,10);

-- 工资等级表

CREATE TABLE salarygrade (

grade INT PRIMARY KEY, -- 级别

losalary INT, -- 最低工资

hisalary INT -- 最高工资

);

-- 添加5个工资等级

INSERT INTO salarygrade(grade,losalary,hisalary) VALUES

(1,7000,12000),

(2,12010,14000),

(3,14010,20000),

(4,20010,30000),

(5,30010,99990);

-- 需求：

-- 1.查询所有员工信息。查询员工编号，员工姓名，工资，职务名称，职务描述

SELECT

t1.id, -- employee's number

t1.ename, -- employee's name

t1.salary, -- employee's salary

t2.jname, -- employee's job name

t2.description -- description of employee's job

FROM

emp t1,

job t2

WHERE

t1.job\_id = t2.id;

-- 2.查询员工编号，员工姓名，工资，职务名称，职务描述，部门名称，部门位置

SELECT

t1.id, -- employee's number

t1.ename, -- employee's name

t1.salary, -- employee's salary

t2.jname, -- employee's job name

t2.description, -- description of employee's job

t3.dname, -- the name of employee's department

t3.loc -- the location of employee's department

FROM

emp t1,

job t2,

dept t3

WHERE

t1.job\_id = t2.id AND t3.id = t1.dept\_id;

-- 3.查询员工姓名，工资，工资等级

SELECT

t1.ename,

t1.salary,

t2.\*

FROM

emp t1,

salarygrade t2

WHERE

t1.salary BETWEEN t2.losalary AND t2.hisalary;

-- 4.查询员工姓名，工资，职务名称，职务描述，部门名称，部门位置，工资等级

SELECT

t1.ename,

t1.salary,

t2.jname,

t2.description,

t3.dname,

t3.loc,

t4.\*

FROM

emp t1,

job t2,

dept t3,

salarygrade t4

WHERE t1.job\_id = t2.id AND t1.dept\_id = t3.id AND t1.salary BETWEEN t4.losalary AND t4.hisalary;

-- 5.查询出部门编号、部门名称、部门位置、部门人数

SELECT

dept\_id, COUNT(id)

FROM

emp

GROUP BY

dept\_id;

SELECT

t1.id,

t1.dname,

t1.loc,

t2.total

FROM

dept t1,

(SELECT

dept\_id, COUNT(id) total

FROM

emp

GROUP BY

dept\_id) t2

WHERE

t1.id = t2.dept\_id;

-- 6.查询所有员工的姓名及其直接上级的姓名,没有领导的员工也需要查询

SELECT \* FROM emp;

SELECT

t1.ename,

t1.mgr,

t2.id,

t2.ename

FROM

emp t1,

emp t2

WHERE

t1.mgr = t2.id;

SELECT

t1.ename,

t1.mgr,

t2.id,

t2.ename

FROM emp t1 LEFT JOIN emp t2 ON t1.mgr = t2.id;