### 作业五

**题目一:**

假设有下面两个关系模式：职工（职工号，姓名，年龄，职务，工资，部门号），其中职工号为主码；部门（部门号，名称，经理名，电话），其中部门号为主码。用SQL语言定义这两个关系模式，要求在模式中完成以下完整性约束条件的定义：（1）定义每个模式的主码；（2）定义参照完整性；（3）定义职工年龄不得超过 60 岁。

表字段参考：

Dept(Deptno, Deptname, Manager, PhoneNumber)

Staff(Empno, Ename,Age, Job, Sal, Deptno)

字段类型自定，不会有影响

**题目二:**

访问：<https://leetcode.com/problemset/database/>

完成以下题目

175 [Combine Two Tables](https://leetcode.com/problems/combine-two-tables)

select Person.FirstName, Person.LastName, Address.City, Address.State

from Person left join Address

on Person.PersonId=Address.PersonId

176 [Second Highest Salary](https://leetcode.com/problems/second-highest-salary)

select

(

select distinct

Salary

from Employee

order by Salary desc

limit 1 offset 1

)as SecondHighestSalary

177. Nth Highest Salary

CREATE FUNCTION getNthHighestSalary(N INT) RETURNS INT

BEGIN

DECLARE M INT;

set M=N-1;

RETURN (

# Write your MySQL query statement below.

select (

select distinct Salary

from Employee

order by Salary desc

limit M,1

)

);

END

178. Rank Scores

select Score,

(select count(distinct Score) from Scores where Score>=s.Score) Rank

from Scores s

order by Score desc

180. Consecutive Numbers

SELECT DISTINCT

l1.Num AS ConsecutiveNums

FROM

Logs l1,

Logs l2,

Logs l3

WHERE

l1.Id = l2.Id - 1

AND l2.Id = l3.Id - 1

AND l1.Num = l2.Num

AND l2.Num = l3.Num

181 Employees Earning More Than Their Managers

select a.Name as Employee

from Employee as a,

Employee as b

where a.ManagerId = b.Id

and a.Salary > b.Salary

182. Duplicate Emails

select distinct a.Email

from Person as a,

Person as b

where a.Id<>b.Id

and a.Email=b.Email

183. Customers Who Never Order

select Customers.Name as Customers

from Customers

where Customers.Id not in

(select CustomerId from Orders)

184. Department Highest Salary

select Department.Name as Department,Employee.Name as Employee,Employee.Salary

from Employee join Department on Employee.DepartmentId = Department.Id

where (

(Employee.DepartmentId , Salary) IN

( SELECT

DepartmentId, MAX(Salary)

FROM

Employee

GROUP BY DepartmentId

)

)