# 1. 查询工资最低的员工信息: last\_name, salary

#①查询最低的工资

SELECT MIN(salary)

FROM employees

#②查询last\_name,salary，要求salary=①

SELECT last\_name,salary

FROM employees

WHERE salary=(

SELECT MIN(salary)

FROM employees

);

# 2. 查询平均工资最低的部门信息

#方式一：

#①各部门的平均工资

SELECT AVG(salary),department\_id

FROM employees

GROUP BY department\_id

#②查询①结果上的最低平均工资

SELECT MIN(ag)

FROM (

SELECT AVG(salary) ag,department\_id

FROM employees

GROUP BY department\_id

) ag\_dep

#③查询哪个部门的平均工资=②

SELECT AVG(salary),department\_id

FROM employees

GROUP BY department\_id

HAVING AVG(salary)=(

SELECT MIN(ag)

FROM (

SELECT AVG(salary) ag,department\_id

FROM employees

GROUP BY department\_id

) ag\_dep

);

#④查询部门信息

SELECT d.\*

FROM departments d

WHERE d.`department\_id`=(

SELECT department\_id

FROM employees

GROUP BY department\_id

HAVING AVG(salary)=(

SELECT MIN(ag)

FROM (

SELECT AVG(salary) ag,department\_id

FROM employees

GROUP BY department\_id

) ag\_dep

)

);

#方式二：

#①各部门的平均工资

SELECT AVG(salary),department\_id

FROM employees

GROUP BY department\_id

#②求出最低平均工资的部门编号

SELECT department\_id

FROM employees

GROUP BY department\_id

ORDER BY AVG(salary)

LIMIT 1;

#③查询部门信息

SELECT \*

FROM departments

WHERE department\_id=(

SELECT department\_id

FROM employees

GROUP BY department\_id

ORDER BY AVG(salary)

LIMIT 1

);

# 3. 查询平均工资最低的部门信息和该部门的平均工资

#①各部门的平均工资

SELECT AVG(salary),department\_id

FROM employees

GROUP BY department\_id

#②求出最低平均工资的部门编号

SELECT AVG(salary),department\_id

FROM employees

GROUP BY department\_id

ORDER BY AVG(salary)

LIMIT 1;

#③查询部门信息

SELECT d.\*,ag

FROM departments d

JOIN (

SELECT AVG(salary) ag,department\_id

FROM employees

GROUP BY department\_id

ORDER BY AVG(salary)

LIMIT 1

) ag\_dep

ON d.`department\_id`=ag\_dep.department\_id;

# 4. 查询平均工资最高的 job 信息

#①查询最高的job的平均工资

SELECT AVG(salary),job\_id

FROM employees

GROUP BY job\_id

ORDER BY AVG(salary) DESC

LIMIT 1

#②查询job信息

SELECT \*

FROM jobs

WHERE job\_id=(

SELECT job\_id

FROM employees

GROUP BY job\_id

ORDER BY AVG(salary) DESC

LIMIT 1

);

# 5. 查询平均工资高于公司平均工资的部门有哪些?

#①查询平均工资

SELECT AVG(salary)

FROM employees

#②查询每个部门的平均工资

SELECT AVG(salary),department\_id

FROM employees

GROUP BY department\_id

#③筛选②结果集，满足平均工资>①

SELECT AVG(salary),department\_id

FROM employees

GROUP BY department\_id

HAVING AVG(salary)>(

SELECT AVG(salary)

FROM employees

);

# 6. 查询出公司中所有 manager 的详细信息.

#①查询所有manager的员工编号

SELECT DISTINCT manager\_id

FROM employees

#②查询详细信息，满足employee\_id=①

SELECT \*

FROM employees

WHERE employee\_id =ANY(

SELECT DISTINCT manager\_id

FROM employees

);

# 7. 各个部门中 最高工资中最低的那个部门的 最低工资是多少

#①查询各部门的最高工资中最低的部门编号

SELECT department\_id

FROM employees

GROUP BY department\_id

ORDER BY MAX(salary)

LIMIT 1

#②查询①结果的那个部门的最低工资

SELECT MIN(salary) ,department\_id

FROM employees

WHERE department\_id=(

SELECT department\_id

FROM employees

GROUP BY department\_id

ORDER BY MAX(salary)

LIMIT 1

);

# 8. 查询平均工资最高的部门的 manager 的详细信息: last\_name, department\_id, email, salary

#①查询平均工资最高的部门编号

SELECT

department\_id

FROM

employees

GROUP BY department\_id

ORDER BY AVG(salary) DESC

LIMIT 1

#②将employees和departments连接查询，筛选条件是①

SELECT

last\_name, d.department\_id, email, salary

FROM

employees e

INNER JOIN departments d

ON d.manager\_id = e.employee\_id

WHERE d.department\_id =

(SELECT

department\_id

FROM

employees

GROUP BY department\_id

ORDER BY AVG(salary) DESC

LIMIT 1) ;