1. Employee

[employee\_id, name, job\_title, level\_SK, dept\_SK,

Manger\_id, location\_SK, salary,start\_date,term\_date]

Level

[level\_sk,level\_name]

Department

[dept\_SK,dept\_name]

Location

[Location\_sk,city,state,country]

* Select the employee in each department with the highest salary in the US inlcude employee name, deparmtment\_name and salary in output

SELECT  d.dept\_name, e.name, e.salary

FROM Department D Left join Employee  E on  d. dept\_SK = e.dept\_SK

            LEFT JOIN Location L on e.location\_SK = L. location\_SK

WHERE L.country  = 'USA'  and RANK() OVER (PARTITION BY d.dept\_SK ORDER BY e.salary) = 1

* 同上 top5

SELECT  d.dept\_name, e.name, e.salary

FROM Department D Left join Employee  E on  d. dept\_SK = e.dept\_SK

            LEFT JOIN Location L on e.location\_SK = L. location\_SK

WHERE L.country  = 'USA'  and DENSE\_RANK() OVER (PARTITION BY d.dept\_SK ORDER BY e.salary) <= 5

* Create a table in database with information from all table for department  Bizops

* Pull a list of managers and their direct reports in the output.
* 助教

SELECT e2.name as manager\_name, e1.name  as employee\_name

FROM employee e1 join employee e2 on e1.manager\_id  = e2.employee\_id

Order by e2.employee\_id

* Find the number of employees that started at the company each quarter

SELECT YEAR(start\_date)  start\_year, QUARTER(start\_date)  start\_quarter, count(employee\_id) number\_of\_employee

FROM employee e

GROUP BY YEAR(start\_date), QUARTER(start\_date)

* Find the average tenure of all employee by level if an employee is still at the company. Term date is null;

Use today's date to calculate tenure

SELECT l.level\_name, AVG(DATEDIFF( curdate(), e.start\_date)) avg\_tenure

FROM employee e join level l on e.level\_SK = l.level\_SK

WHERE term\_date is NULL

GROUP BY e.level\_SK;

助教

Select

Level\_sk,

avg(DATEDIFF(coalesce(term\_date, current\_date(1),start\_date 1) as avg\_tenure

From employee

Group by level\_sk