**lAggregate functions**

Database Name: **HR**

1. Display the maximum, minimum and average salary and commission earned.

select max(salary),min(salary),avg(salary),

max(commission\_pct),min(commission\_pct),avg(commission\_pct)from hr.employees group by employee\_id

1. Display the department number, total salary payout and total commission payout for each department.

select d.department\_id,

sum(e.salary),

sum(e.commission\_pct)

from hr.departments d left join hr.employees e

on d.department\_id=e.department\_id

group by d.department\_id

1. Display the department number and number of employees in each department.

select d.department\_id,

count(e.employee\_id)

from hr.departments d left join hr.employees e

on d.department\_id=e.department\_id

group by d.department\_id

1. Display the department number and total salary of employees in each department.

select d.department\_id,

sum(e.salary)

from hr.departments d left join hr.employees e

on d.department\_id=e.department\_id

group by d.department\_id

1. Display the employee’s name who doesn't earn a commission. Order the result set without using the column name

select concat(last\_name,

first\_name) as name

from hr.employees

where commission\_pct is null

order by name

1. Display the employees name, department id and commission. If an Employee doesn't earn the commission, then display as 'No commission'. Name the columns appropriately

select concat(last\_name,

first\_name) as name,department\_id,

case when cast(commission\_pct as char)

is null then 'No Commission'

else cast(commission\_pct as char) end as commission

from hr.employees

1. Display the employee's name, salary and commission multiplied by 2. If an Employee doesn't earn the commission, then display as 'No commission'. Name the columns appropriately

select concat(last\_name,

first\_name) as name,salary,

case when cast(commission\_pct as char)

is null then 'No Commission'

else cast((commission\_pct\*2) as char) end as commission

from hr.employees

1. Display the employee's name, department id who have the first name same as another employee in the same department

select first\_name,department\_id

from hr.employees

group by first\_name,department\_id

having count(first\_name)>1;

1. Display the sum of salaries of the employees working under each Manager.

select sum(salary)

from hr.employees

group by manager\_id

1. Select the Managers name, the count of employees working under and the department ID of the manager.

SELECT d.Manager\_Name, d.employeesCount

FROM(

SELECT m.[employee\_id], concat\_ws(' ',m.[first\_name],m.[last\_name]) as Manager\_Name, count(concat\_ws(' ',e.[first\_name],e.[last\_name]))as employeesCount

FROM [HR].[employees] e

INNER JOIN [HR].[employees] m ON e.Manager\_Id = m.[employee\_id]

group by m.[employee\_id],concat\_ws(' ',m.[first\_name],m.[last\_name])

) d

1. Select the employee name, department id, and the salary. Group the result with the manager name and the employee last name should have second letter 'a'.
2. Display the average of sum of the salaries and group the result with the department id. Order the result with the department id.

select e.[department\_id] ,avg(e.salary) as avg

from [HR].[employees] e left join[HR].[departments] d

on e.[department\_id] =d. [department\_id]

group by e.[department\_id]

order by e.[department\_id]

1. Select the maximum salary of each department along with the department id

select department\_id,max(salary)

from hr.employees

group by department\_id

1. Display the commission, if not null display 10% of salary, if null display a default value 1

select

case

when commission\_pct is not null then salary\* 0.1

else 1

end as commission

from hr.employees