CREATE TABLE departments (

dept\_id INT PRIMARY KEY,

dept\_name VARCHAR(100)

);

create table employee(

emp\_name varchar(25),

emp\_id int primary key,

dept\_id int,

foreign key (dept\_id) references departments(dept\_id)

);

# forign key is a column in a table that reference the primary key in another table;

select \* from employee;

select emp\_id, emp\_name from employee;

select \* from departments;

describe employee;

-- inserting the values into tables

insert into employee (emp\_name, emp\_id, dept\_id) values ('rama',127,4);

insert into departments(dept\_id, dept\_name) values(4, 'technical');

-- used t alter the table (adding salary column)

ALTER TABLE employee

ADD salary DECIMAL(10, 2);

-- update the salary column

update employee set salary=25000 where emp\_id=124;

update employee set salary =5000 where emp\_id=128;

-- delete row defaoult created row

UPDATE `sql\_com`.`employee` SET `emp\_id` = '', `salary` = '' WHERE (`emp\_id` = '0');

-- calculation

select emp\_id,salary, salary-1000 'total' from employee;

-- delete a row

delete from employee where emp\_id=121;

-- using where clause

select salary, emp\_name from employee where salary<=10000;

select \* from employee where salary>15000 order by dept\_id;

select \* from employee where salary>10000 order by salary desc;

select \* from employee order by salary;

select \* from employee where dept\_id=2 order by salary;

-- and -- or -- between- -and --in

select \* from employee where salary=15000 and dept\_id=2;

select \* from employee where salary>15000 or dept\_id=2;

select \* from employee where salary between 15000 and 25000;

select \* from employee where dept\_id in(2 ,4);

-- pattern matching

select \* from employee where emp\_name like 'b%'; # strat with b only

select \* from employee where emp\_name like '%b%'; # it contains both starting with b and anywhere

-- creating category

select emp\_name , salary,

case when salary <= 10000 then 'under 10k'

when salary < 20000 then 'under 20K'

when salary < 30000 then 'under 30k'

else '40k or more'

end as 'salary category'

from employee;

-- joins

SELECT emp.emp\_id, emp.salary, d.dept\_id, d.dept\_name

FROM employee emp

JOIN departments d ON d.dept\_id = emp.dept\_id;

select e.emp\_name, d.dept\_id, d.dept\_name

from employee e

left join departments d on d.dept\_id = e.dept\_id;

select e.emp\_name, d.dept\_name

from employee e

right join departments d on d.dept\_id= e.dept\_id;

-- group by aggregation

# avg, max, min

select dept\_id , sum(salary)

from employee

group by dept\_id;