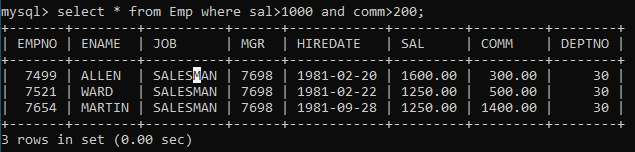
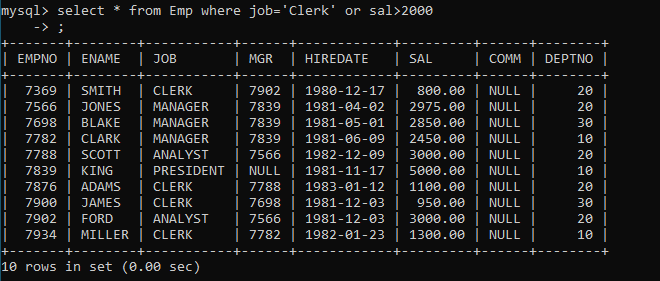
Database Assignment DAY 1

Note : Use Emp, dept and salgrade table

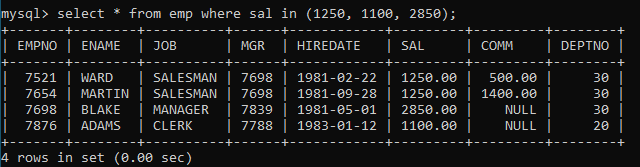
1. To list all records with sal > 1000 and comm>200

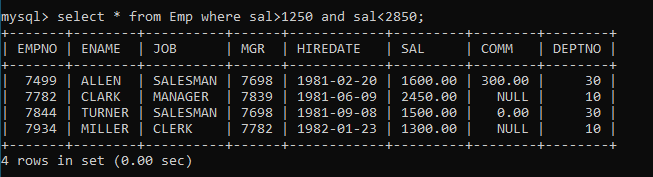


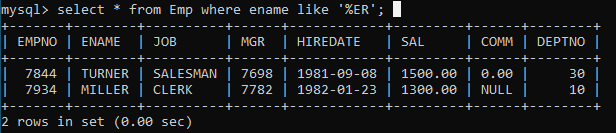
1. To list all record with job=’Clerk’ or sal>2000



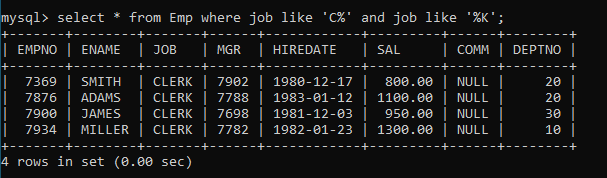
1. To list all the record with sal=1250 or 1100 or 2850



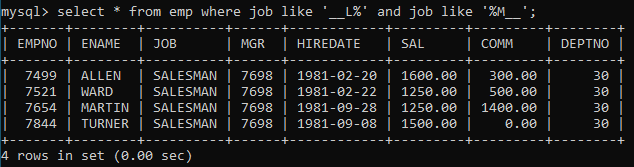
1. To list all employees with sal>1250 and <2850
2. To list all employees with name ends with ER



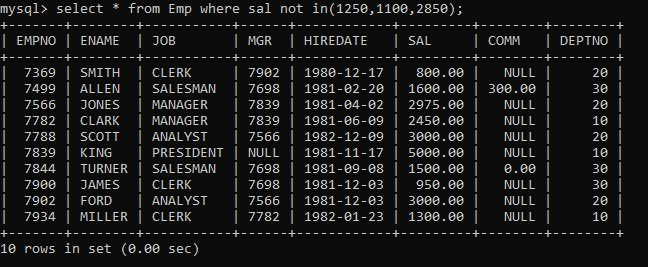
1. To list all employees with job starts with C and ends with K



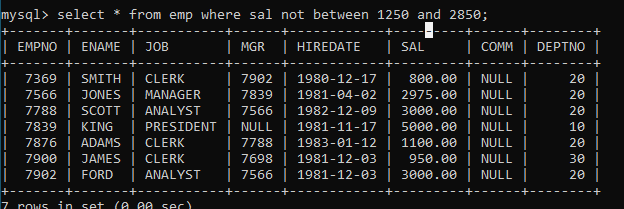
1. To list all employees with job contains L at third position and M at third last position



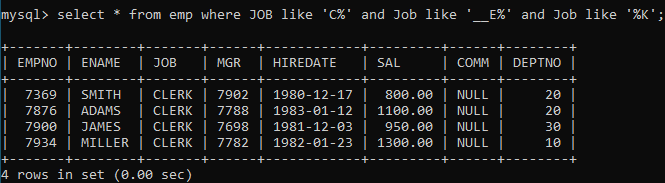
1. To list all the record with sal not equal to 1250 or 1100 or 2850



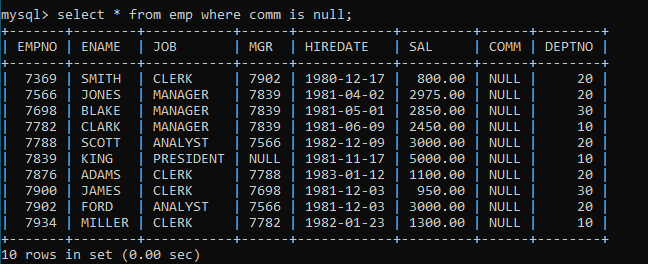
1. To list all employees with sal not >1250 and <2850



1. To list all employees with job starts with C , E at 3rd position and ends with K



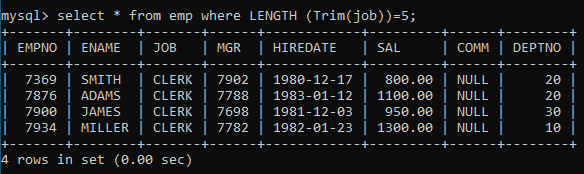
1. To list all rows with comm is null



1. To list all employees with sal is null and name starts with ‘S’

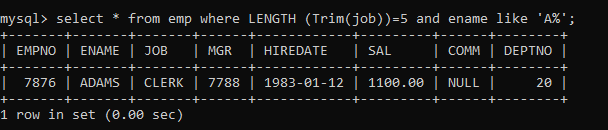


1. To list all employees with job contains 5 characters



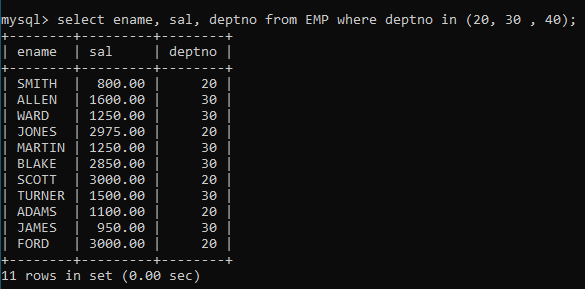
1. To list all employees with name contain ‘A’ at 1 position and job

Contains 5 characters

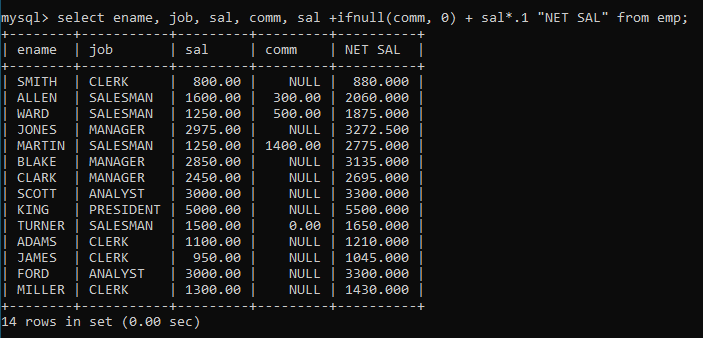


Q2. Solve the following

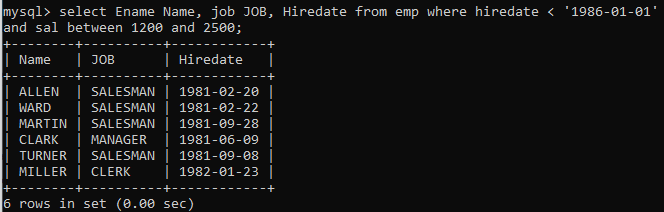
* 1. Retrieve the details (Name, Salary and dept no) of the emp who are working in department code 20, 30 and 40.



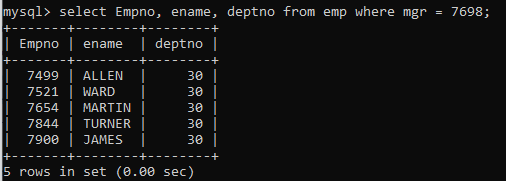
* 1. Display the total salary of all employees . Total salary will be calculated as sal+comm+sal\*0.10



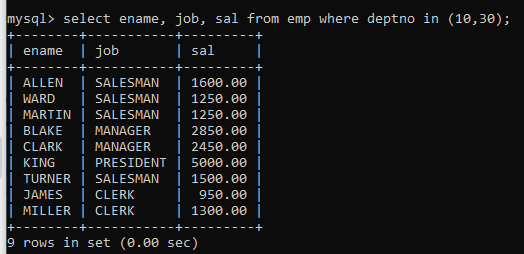
* 1. List the Name and job of the emp who have joined before 1 jan 1986 and whose salary range is between 1200 and 2500. Display the columns with user defined Column headers.



* 1. List the empno, name, and department number of the emp works under manager with id 7698

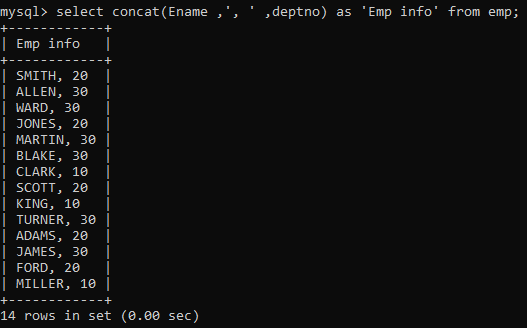


* 1. List the name, job, and salary of the emp who are working in departments 10 and 30.

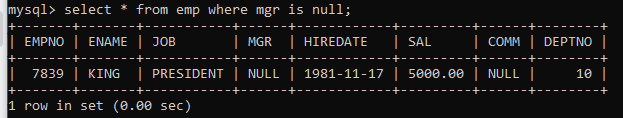


* 1. Display name concatenated with dept code separated by comma and space. Name

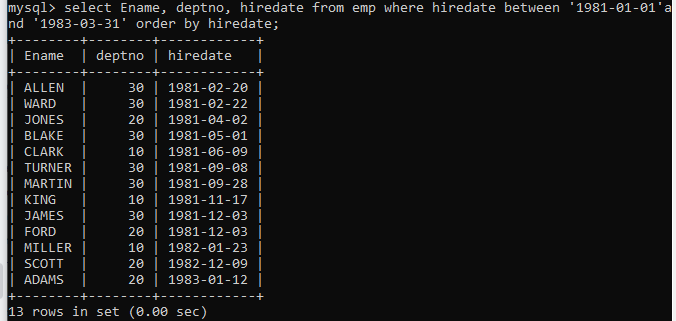
the column as ‘Emp info’.



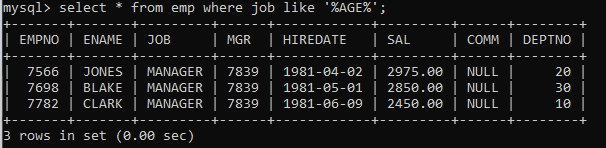
* 1. Display the emp details who do not have manager.



* 1. Write a query which will display name, department no and date of joining of all employee who were joined January 1, 1981 and March 31, 1983. Sort it based on date of joining (ascending).

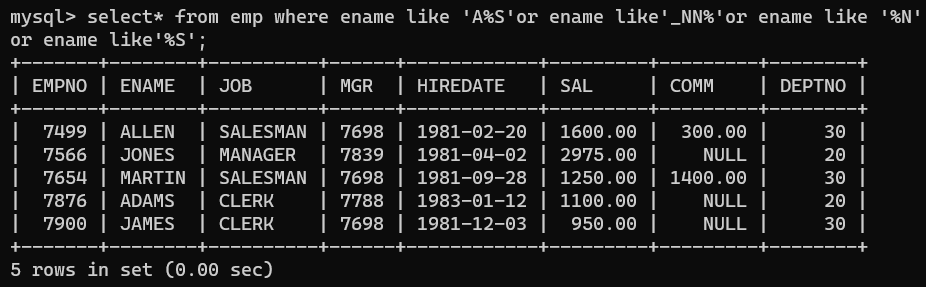


* 1. Display the employee details where the job contains word ‘AGE’ anywhere in the Job

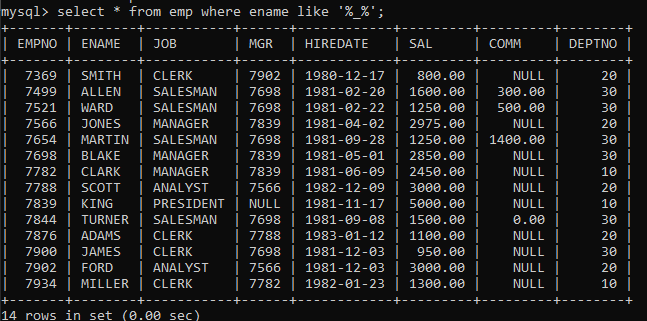


10. List the details of the employee , whose names start with ‘A’ and end with ‘S’ or

whose names contains N as the second or third character, and ending with either ‘N’ or ‘S’.



11. List the names of the emp having ‘\_’ character in their name.



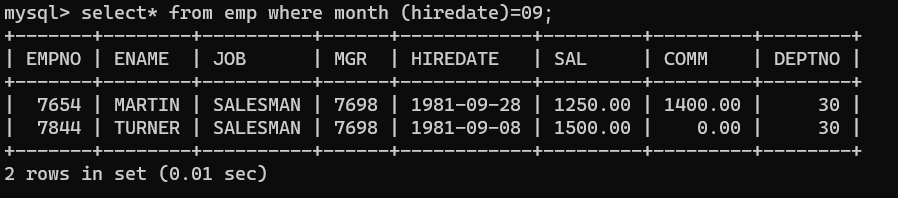
Single Row functions

1. To list all employees and their email, to generate email use 2 to 5 characters from ename

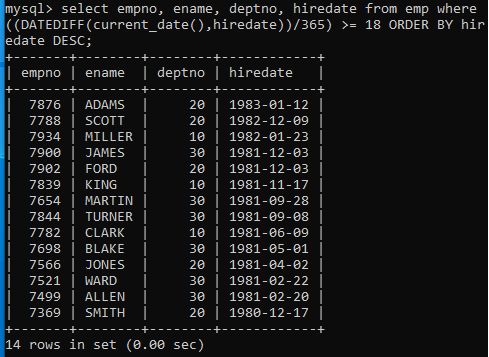
Concat it with 2 to 4 characters in job and then concat it with ‘@mycompany.com’



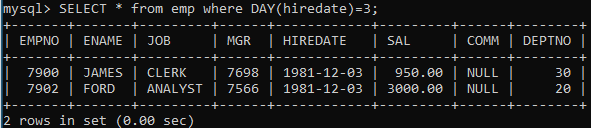
1. List all employees who joined in September.



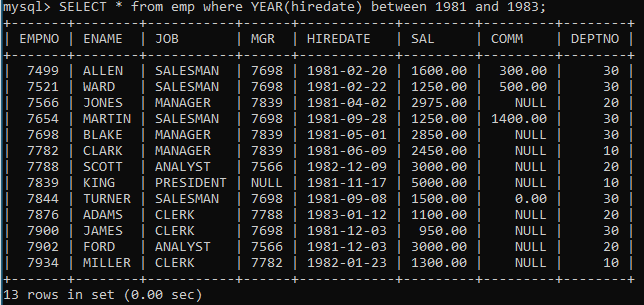
1. List the empno, name, and department number of the emp who have experience of 18 or more years and sort them based on their experience.



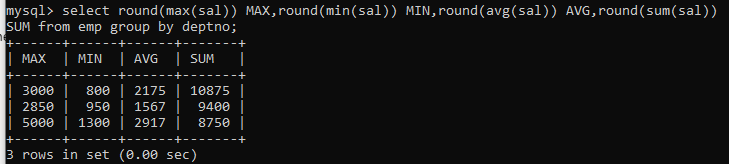
1. Display the employee details who joined on 3rd of any month or any year

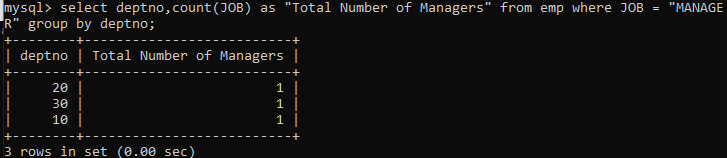


1. display all employees who joined between years 1981 to 1983.

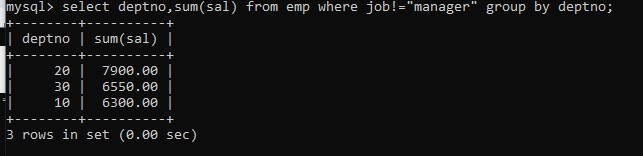


Group functions

1. Display the Highest, Lowest, Total & Average salary of all employee. Label the columns Maximum, Minimum, Total and Average respectively for each Department. Also round the result to the nearest whole number.
2. Display Department no and number of managers working in that department. Label the

column as ‘Total Number of Managers’ for each department.

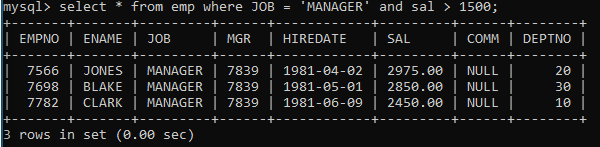
1. Get the Department number, and sum of Salary of all non managers where the sum is greater than 2000.



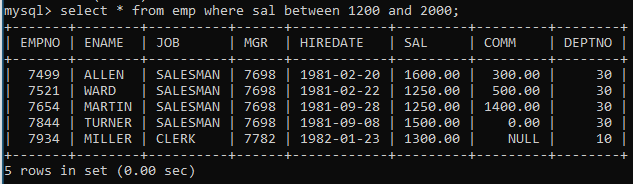
Database Assignment DAY 5

Write SQL statement for the following

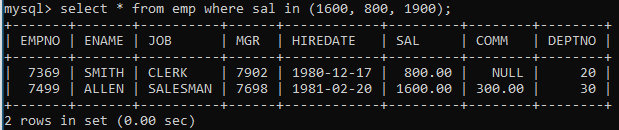
1. To find all managers with salary >1500



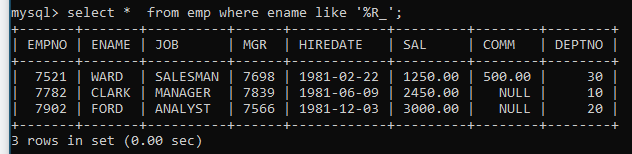
2. list all employees with sal >1200 and < 2000



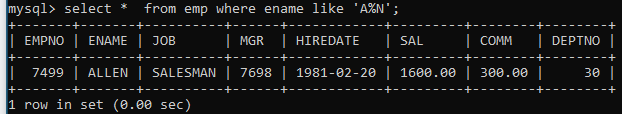
3. list all employees with sal is 1600 or sal is 800 or sal is 1900



4. list all employees with R at second last position in name

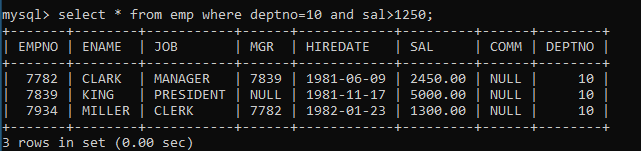


5. List all employees with name starts with A and ends with N

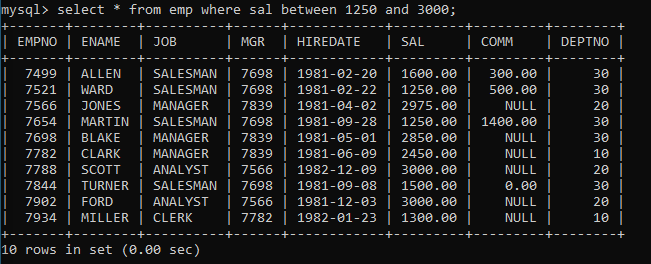


Q2. Solve following

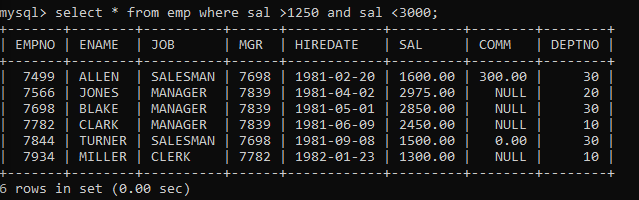
1. list all employees with salary > 1250 and dept no=30



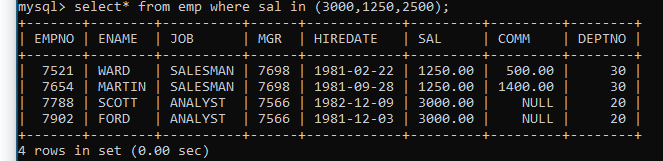
2. list all employees with salary >=1250 and <= 3000



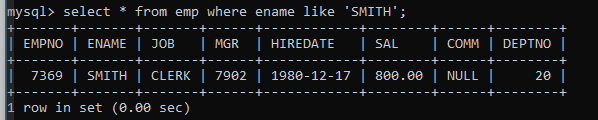
3. list all employees with salary >1250 and < 3000



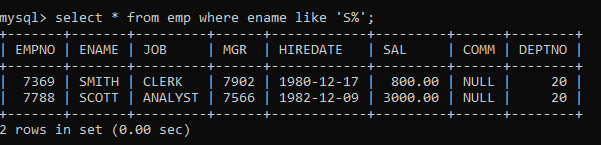
4. list all employees with salary either equal to 3000 or 1250 or 2500



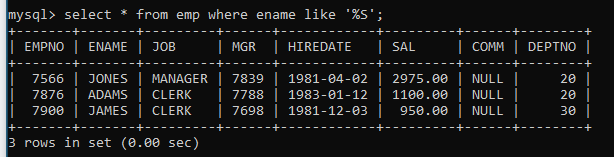
5. list all employee with name=SMITH



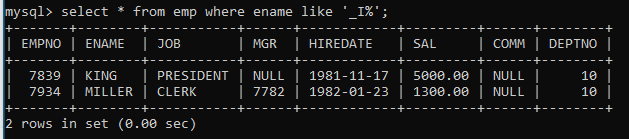
6. list all employees with name starting with S



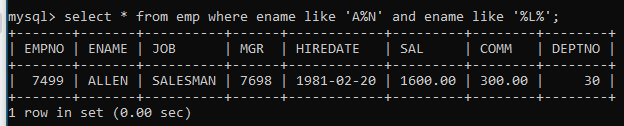
7. list all employees with name ending with S



8. list all employees with name contains I at 2nd position



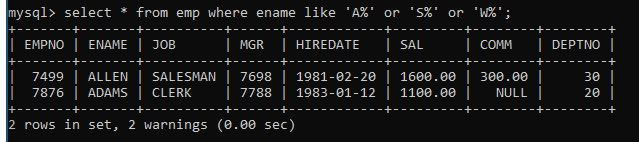
9. list all employees with name starts with A ends with N and somewhere in between L is there



10. list all employees with name starts with A and B at 3 rd position and P at second last position

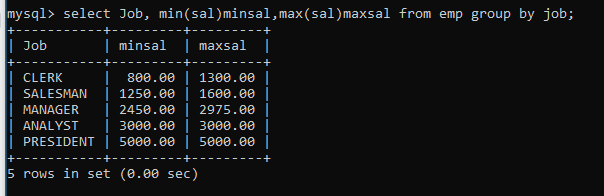


11. List all employees with name starts with either A or starts with S or starts with W

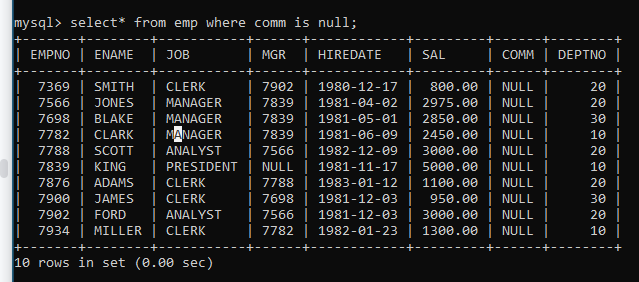


Aggregate Functions

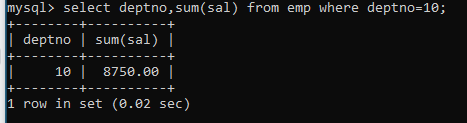
12. find max sal and min sal for each job



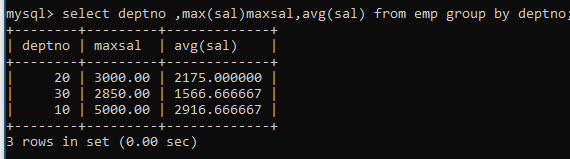
13. find how many employees have not received commission



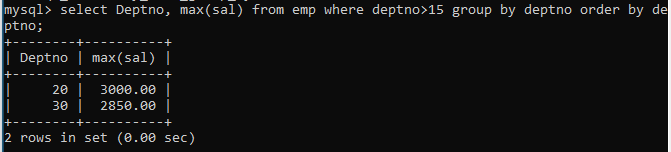
14. find sum of sal of all employees working in dept no 10



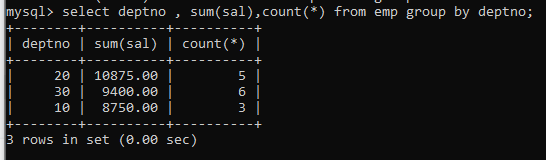
15. find maximum salary,average sal for each job in every department



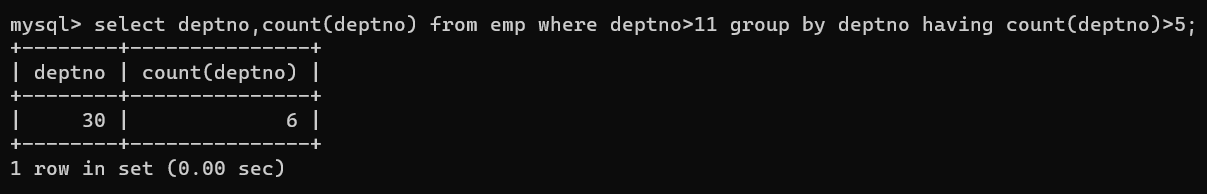
16. find max salary for every department if deptno is > 15 and arrange data in deptno order

.

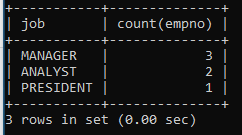
17. find sum salary for every department if sum is > 3000

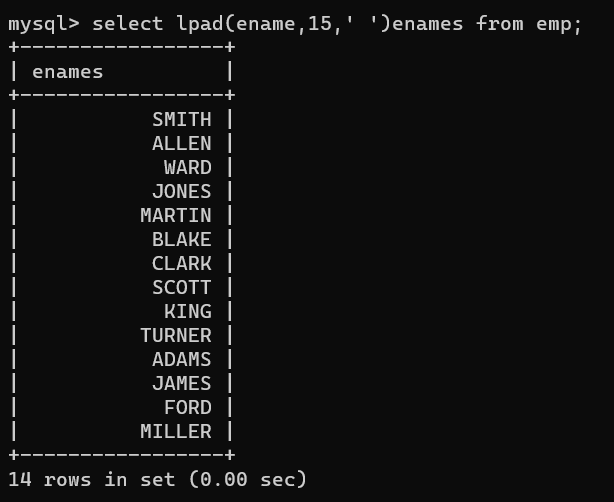


18. list all department which has minimum 5 employees

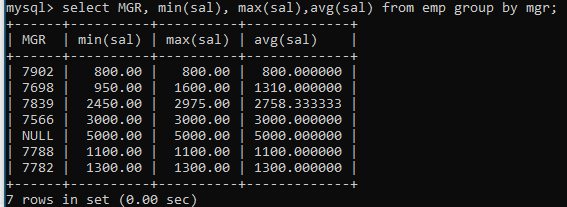


19. count how many employees earn salary more than 2000 in each job



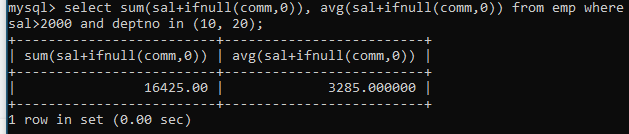
20. list all enames and jobs in small case letter21. list all names and jobs so that the length of name should be 15 if it is smaller then add spaces to left

22. display min sal,max sal, average sal for all employees working under same manager

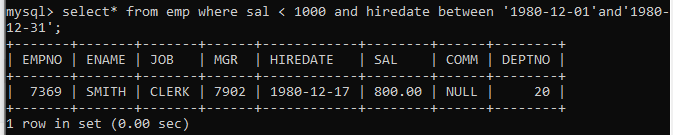


23. find sum of total earnings(sal+comm), average of sal+comm,

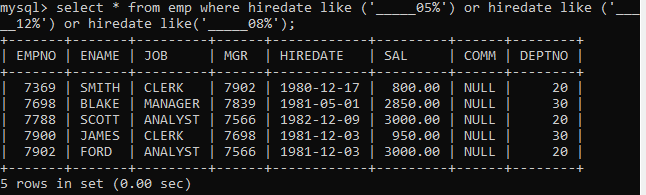
for all employees who earn sal > 2000 and work in either dept no 10 or 20



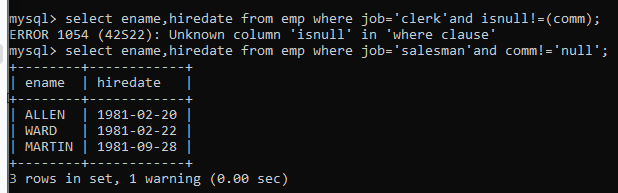
24. list all employees who joined in Dec 1980 and salary is<1000



25. list all employees joined in either aug or may or dec

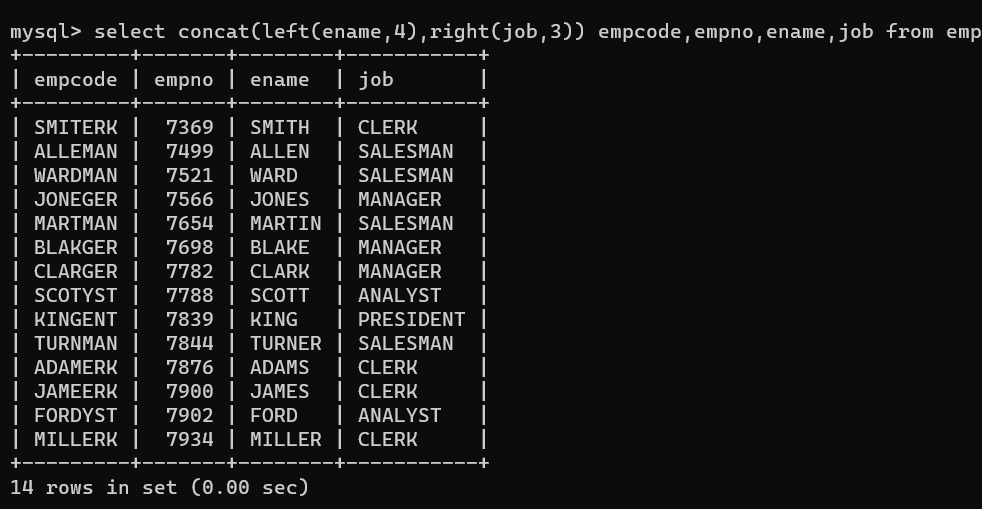


26. display name and hiredate in dd/mm/yy format for all employees whose job is salesman and they earn some commission

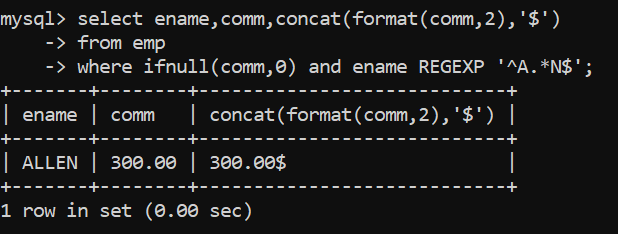


27. list empcode,empno,name and job for each employee. (note :empcode is 3 to 5 characters

from name and last 2 characters of job)



28. display thousand separator and $ symbol for commission if it is null then display it as 0 for all employees whose name starts with A and ends with N

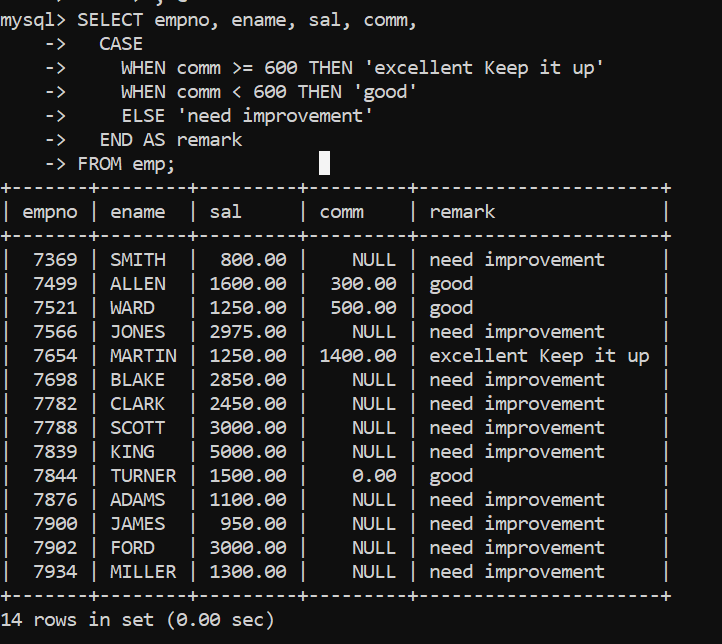


29. Display empid,name,sal,comm,remark Remark should base on following conditions

comm >= 600 "excellent Keep it up"

if it < 600 or not null "good"

otherwise "Need improvement"



30. Display empid, name, deptno and department name by using following conditions.

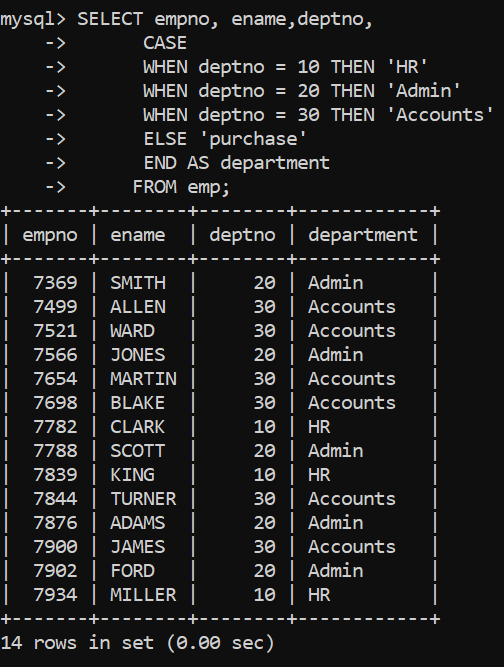
dept 10 then "Hr"

if 20 then "Admin"

if 30 then "accounts"

otherwise purchase

Topic ----------------- create Table, DML , subquery and joins



31. Practice creating following tables

MySQL syntax:

create table mydept\_DBDA

(

deptid int primary key,

dname varchar(20) not null unique,

dloc varchar(20)

)

Oracle syntax:

create table mydept\_DBDA

(

deptid number primary key,

dname varchar2(20) not null unique,

dloc varchar2(20)

)

insert into mydept\_DBDA values(30,'Purchase','Mumbai');

MySql syntax:

create table myemployee

(

empno int primary key,

fname varchar(15) not null,

mname varchar(15),

lname varchar(15) not null,

sal float(9,2) check(sal >=1000),

doj date,

passportnum varchar(15) unique,

deptno int,

constraint fk\_deptno foreign key(deptno) references mydept\_DBDA(deptid) on

delete set null

on update cascade

)

Oracle syntax:

create table myemployee

(

empno number(5) primary key,

fname varchar2(15) not null,

mname varchar2(15),

lname varchar2(15) not null,

sal number(9,2) check(sal >=1000),

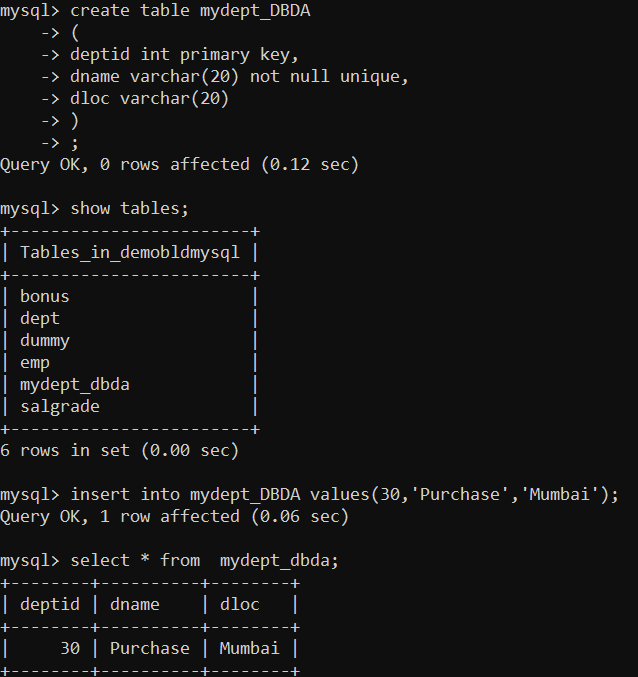
doj date default sysdate,

passportnum varchar2(15) unique,

deptno number constraint fk\_deptno references mydept\_DBDA(deptid) on delete

cascade

)



32. Create following tables Student, Course

Student (sid,sname) ---------------- sid ---primary key

Course(cid,cname)-------------- cid ---primary key

Marks(studid,courseid,marks)

Sample data for marks table

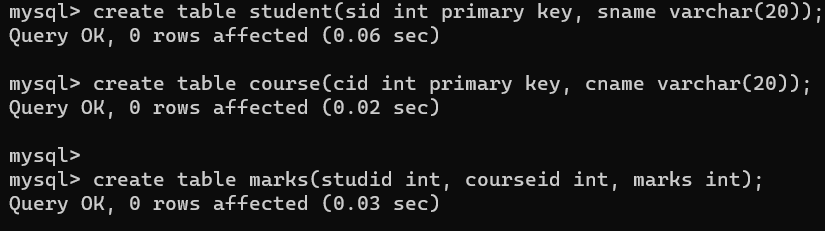
studid,courseid,marks

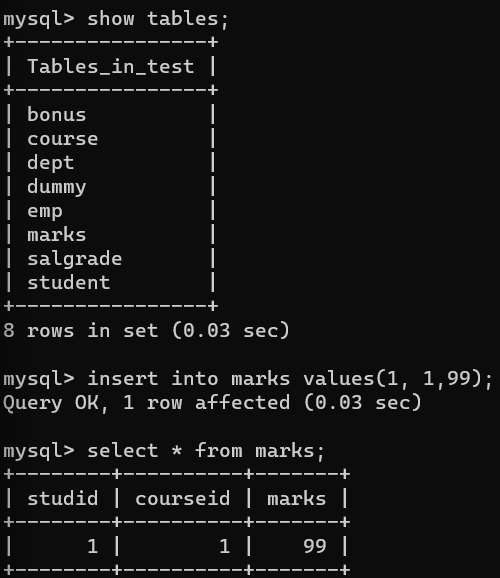
1 1 99

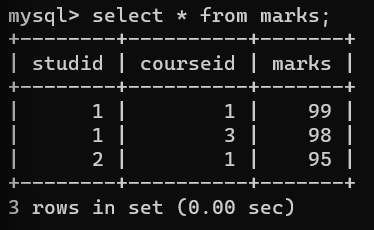
1 3 98

2 1 95

2 2 97







33. Create empty table emp10 with table structure same as emp table.

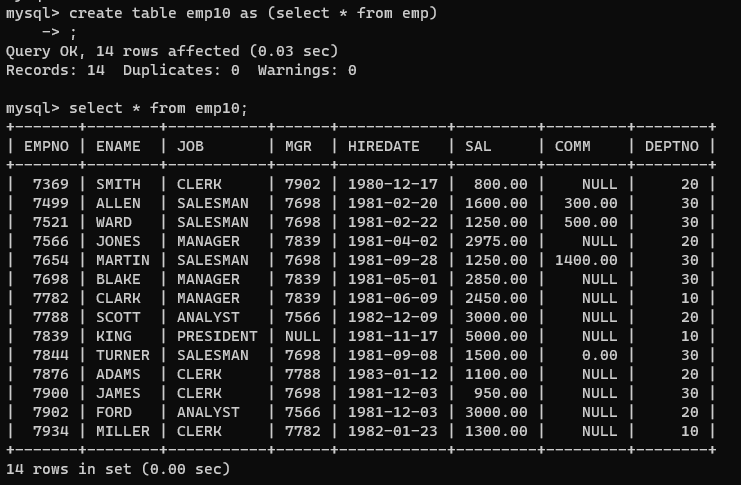
create table emp10 as

(

select \*

from emp

)



34. Solve following using alter table

add primary key constraint on emp,dept,salgrade

emp ----→ empno

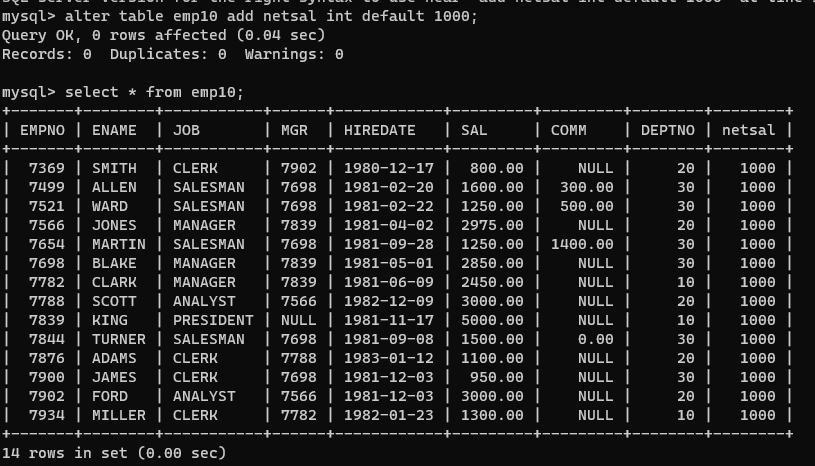
dept---→ deptno

salgrade---→ grade

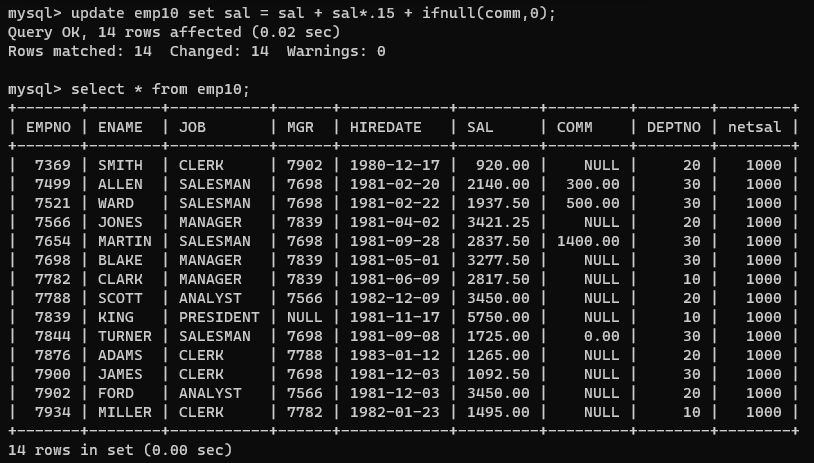
add foreign key constarint in emp

deptno --->> dept(deptno)

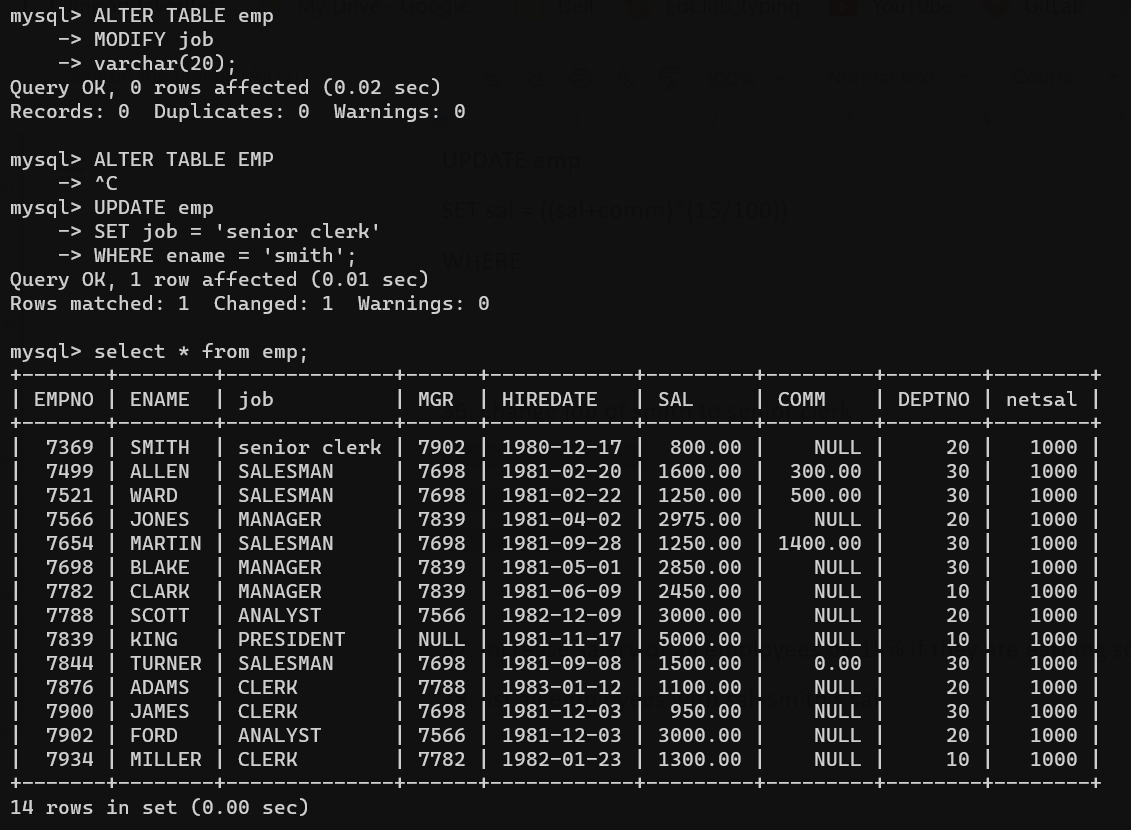
add new column in emp table netsal with constraint default 1000



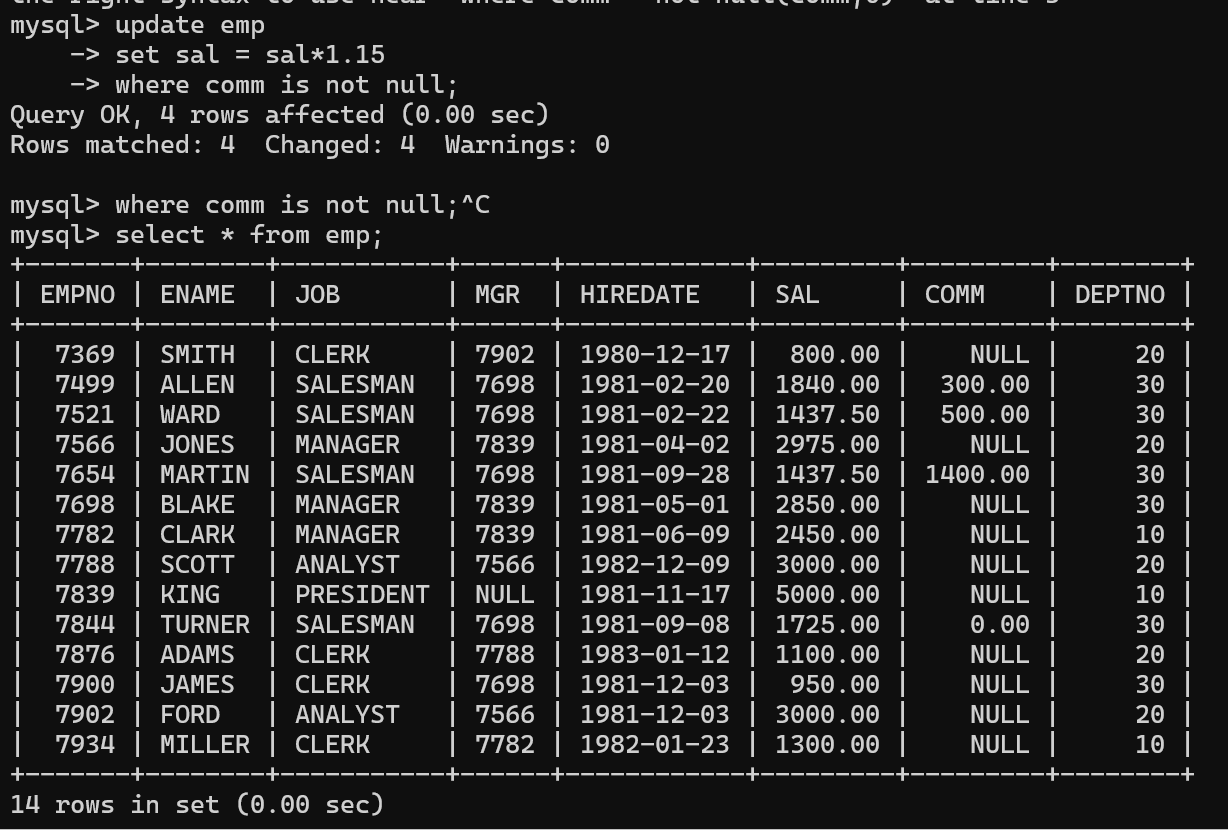
35. Update employee sal ---- increase sal of each employee by 15 % sal +comm, change the job to manager and mgr to 7777 for all employees in deptno 10.



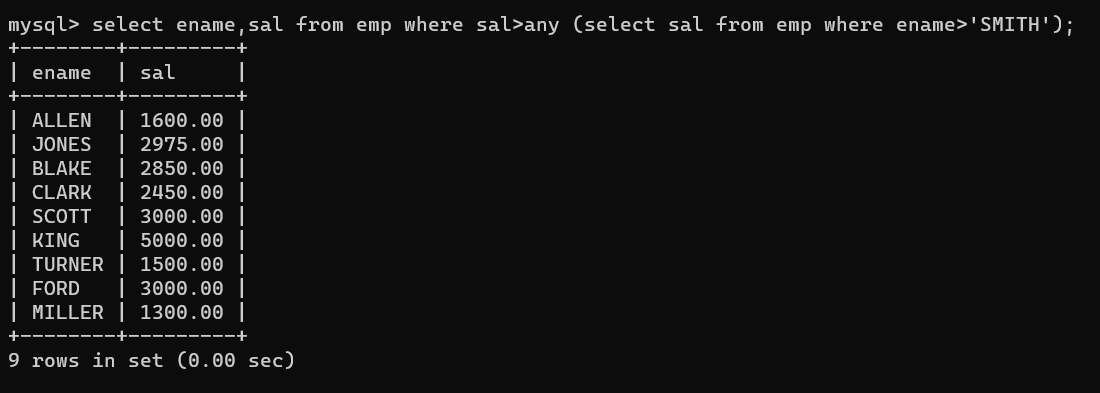
36. change job of smith to senior clerk



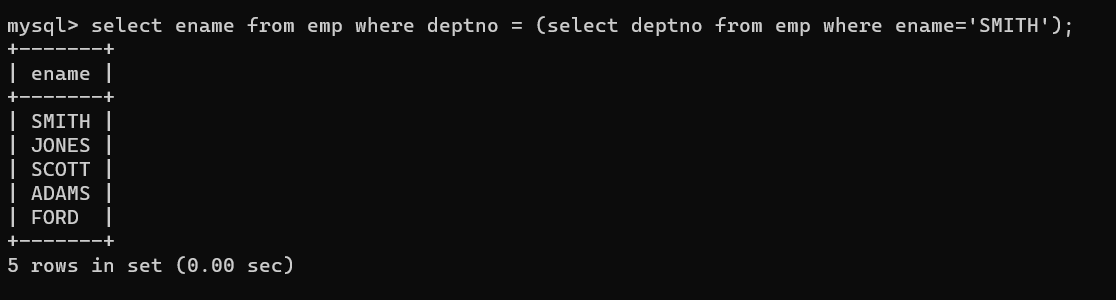
37. increase salary of all employees by 15% if they are earning some commission



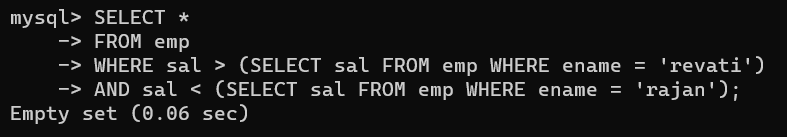
38. list all employees with sal>smith's sal



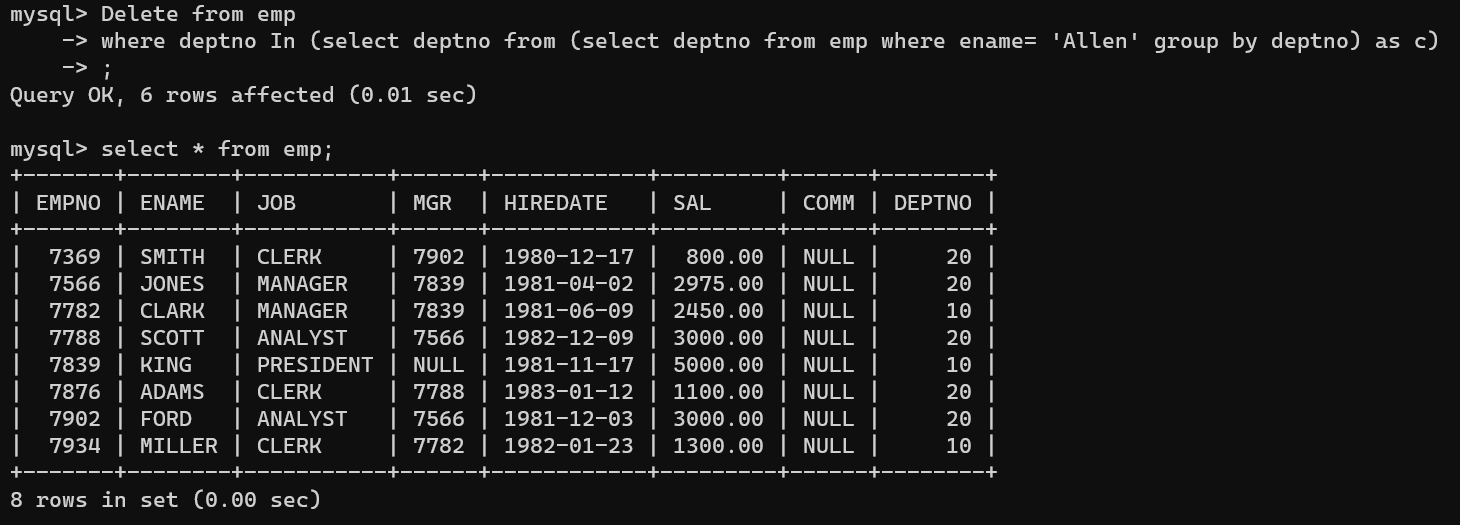
39. list all employees who are working in smith's department



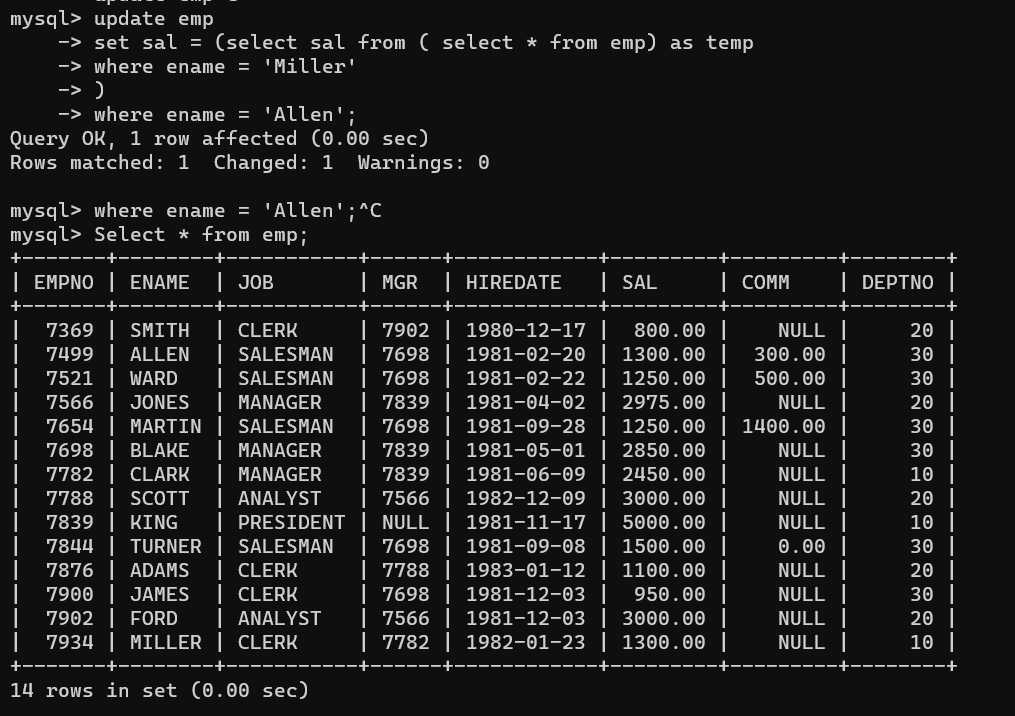
40. list all employees with sal < rajan's sal and salary > revati's sal



41. delete all employees working in alan's department

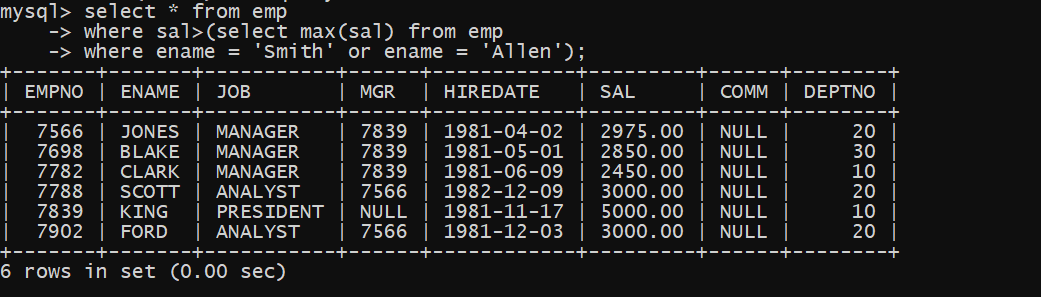


42. change salary of Alan to the salary of Miller.

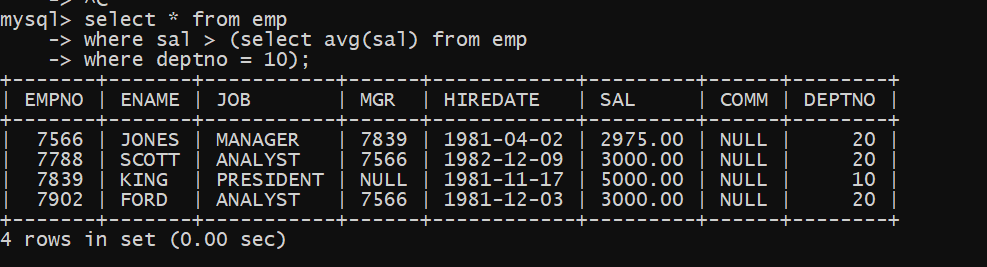


43. change salary of all emplees who working in Wall's department to the salary of Miller.

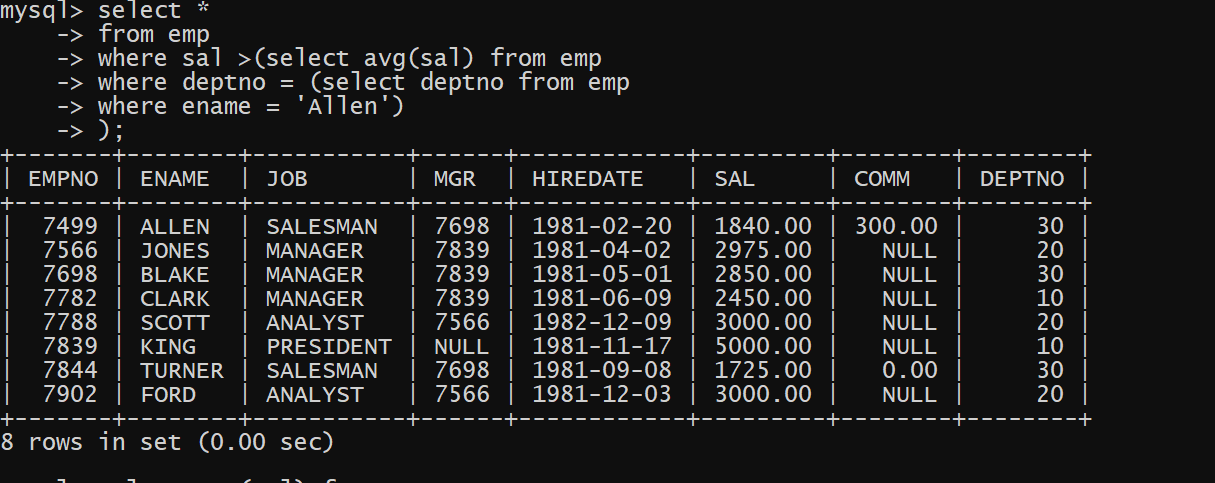
44. list all employees with salary > either Smith's salary or alan's sal



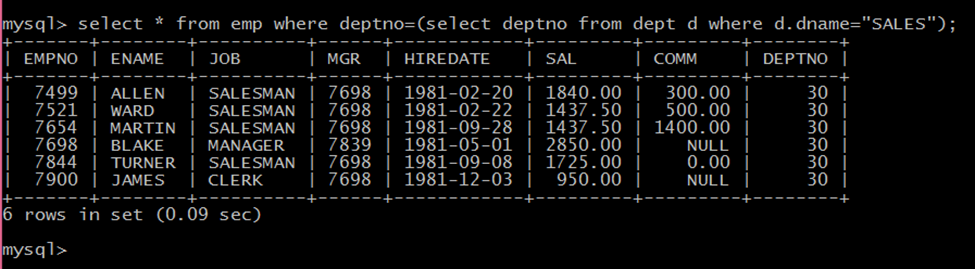
45. list all employees who earn more than average sal of dept 10



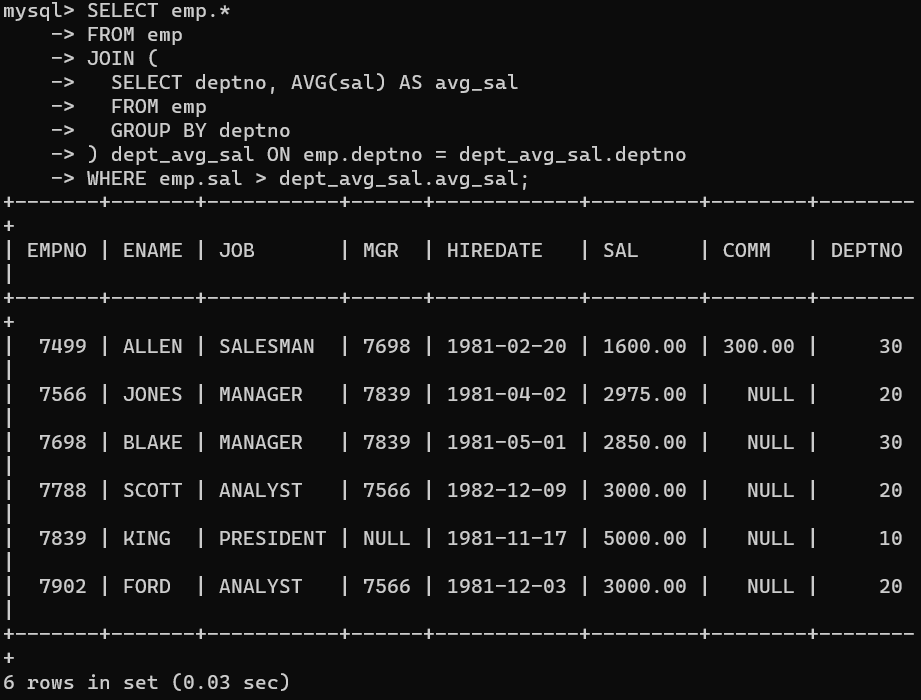
46. list all employees who earn more than average sal of Alan's department



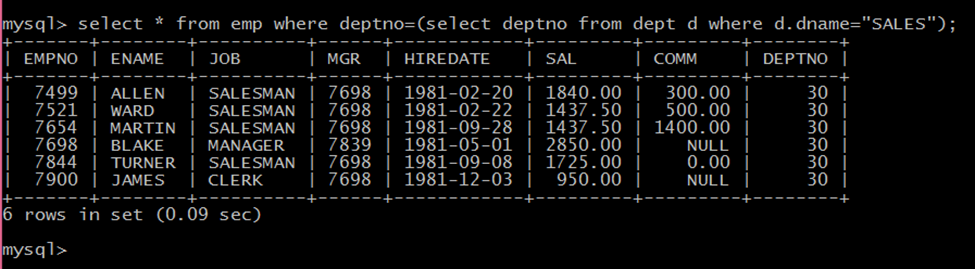
47. list all employees who are working in purchase department



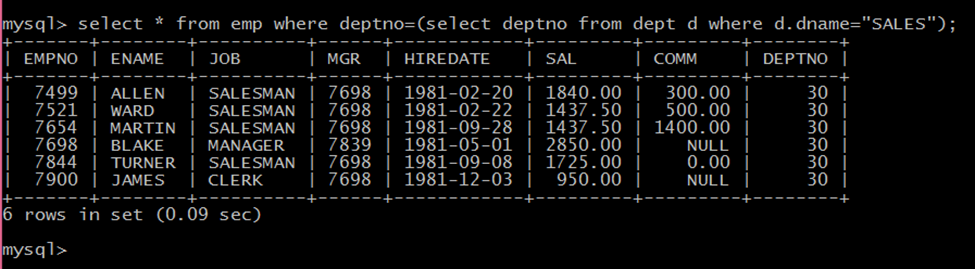
48. list all employees who earn more than average salary of their own department



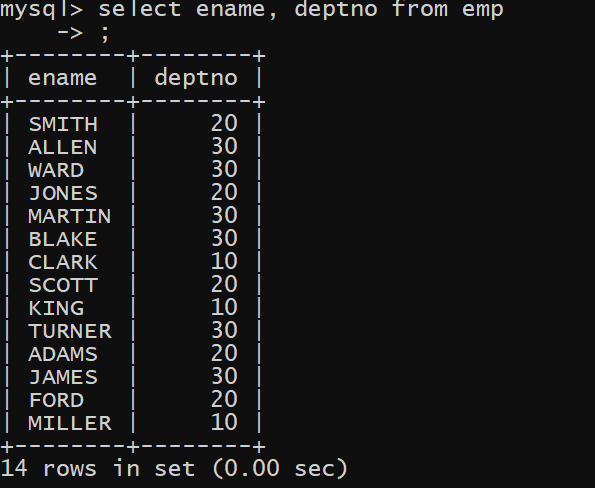
49. list all employees who earn sal < than their managers salary



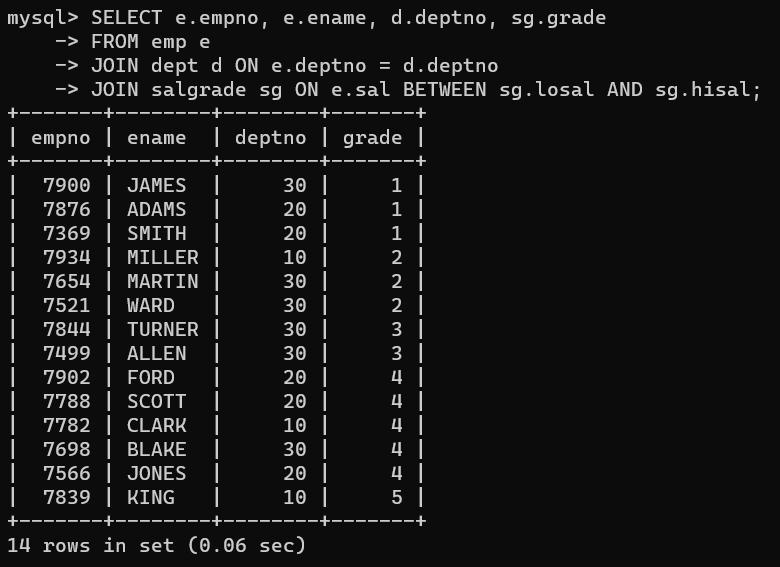
50. list all employees who are earning more than average salary of their job



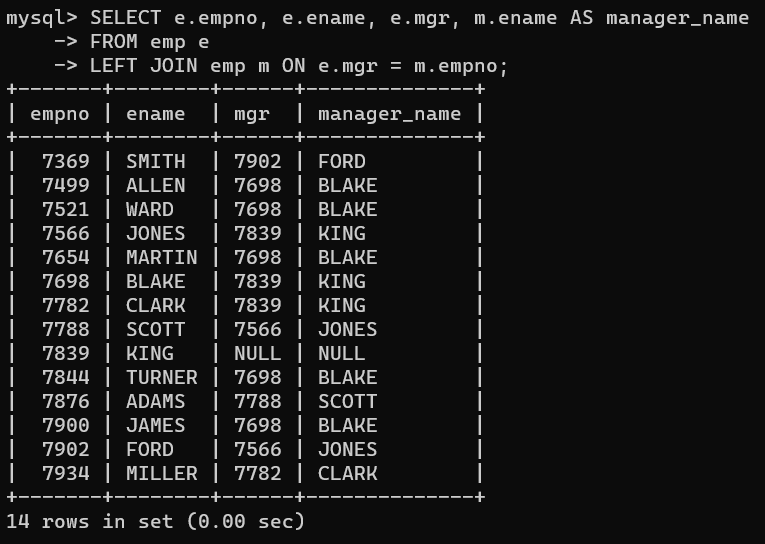
51. display employee name and department



52. display empno,name,department name and grade (use emp,dept and salgrade table)



53. list all employees number,name, mgrno and manager name



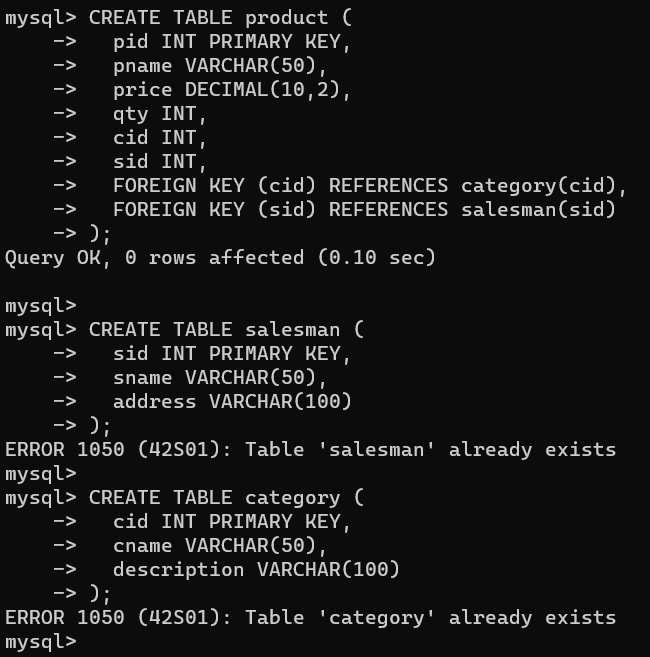
54. create following tables and solve following questions(primary keys are marked in yellow)

foreign keys are marked in green

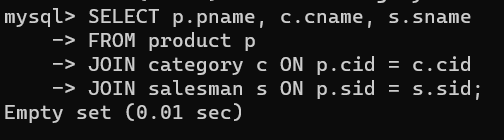
product(pid,pname,price,qty,cid,sid)

salesman (sid,sname,address)

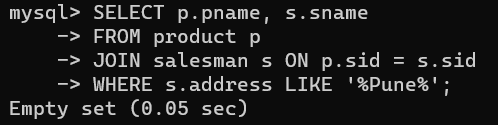
category(cid,cnam,descritpion)



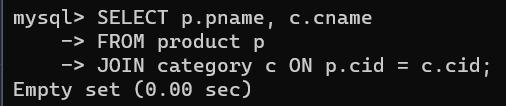
1. list all product name,their category name and name of a person, who sold that product



2. list all product name and salesman name for all salesman who stays in pune



3. list all product name and category name



55. create following tables and solve following questions(primary keys are marked in yellow)

foreign keys are marked in green

faculty(fid,fname,sp.skill1,sp.skill2)

courses(cid,cname,rid,fid)

room(roomid,rname,rloc)

faculty

fid fname spskill1 spskill2

10 kjzhcjhz a b

11 sdd x z

12 lksjk a x

13 ksdjlkj a b

courses

cid cname rid fid

121 DBDA 100 10

131 DAC 101

141 DTISS

151 DIOT 105 12

Room

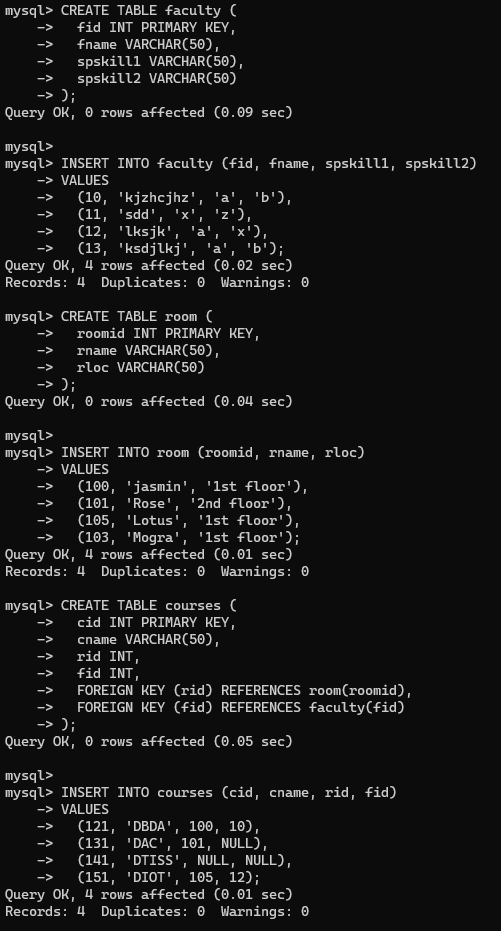
roomid rname rloc

100 jasmin 1st floor

101 Rose 2nd floor

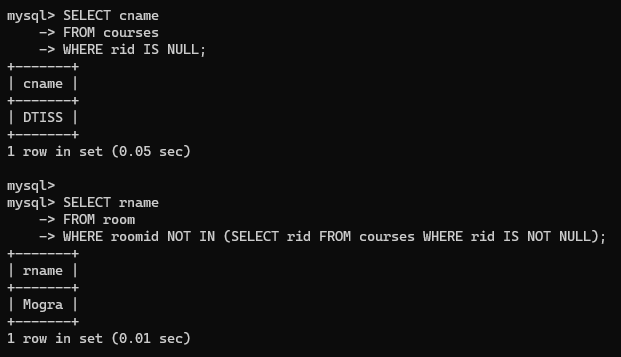
105 Lotus 1st floor

103 Mogra 1st floor



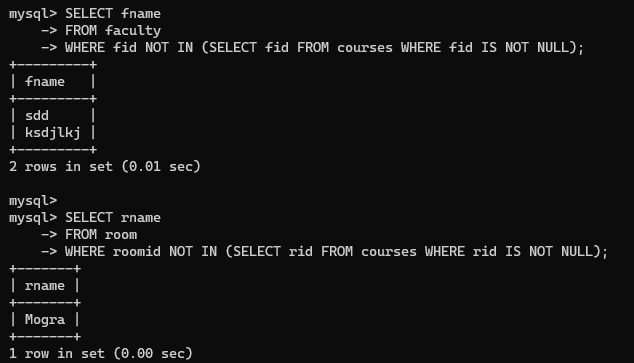
1. list all courses for which no room is assigned and all rooms for which are

available

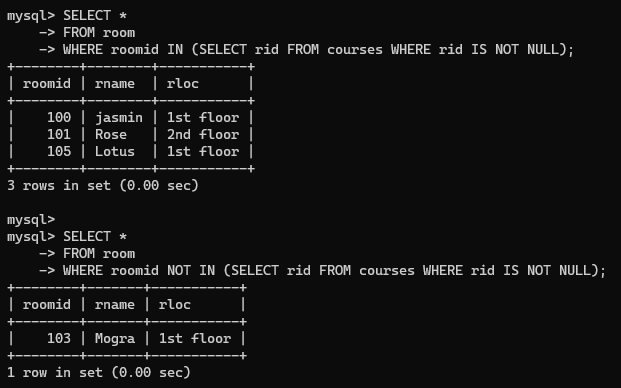


2. list all faculties who are not allocated to any course and rooms which are not

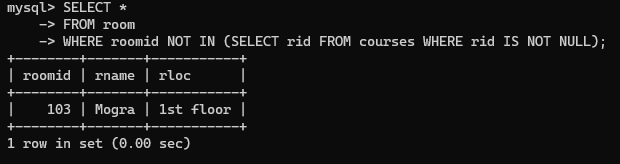
allocated to any course



3. list all rooms which are allocated or not allocated to any courses

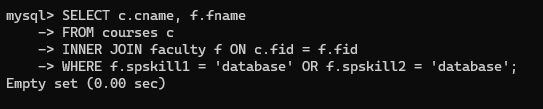


4. list all rooms which are not allocated to any courses



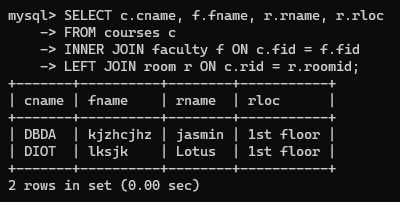
5. display courses and faculty assigned to those courses whose special skill is

database



6. display time table --- it should contain course details , faculty and room

details



56. create following tables with given constraints

product---- qty >0, default 20.00,pname not null and unique

prodid pname qty price catid sid

123 lays 30 30.00 1 12

111 pepsi 40 50.00 4 11

134 nachos 50 50.00 1 12

124 dairy milk 40 60.00 2 14

124 pringles 40 60.00 1 14

saleman ----- sname -----not null

sid sname city

11 Rahul Pune

12 Kirti Mumbai

13 Prasad Nashik

14 Arnav Amaravati

category ---- cname unique and not null

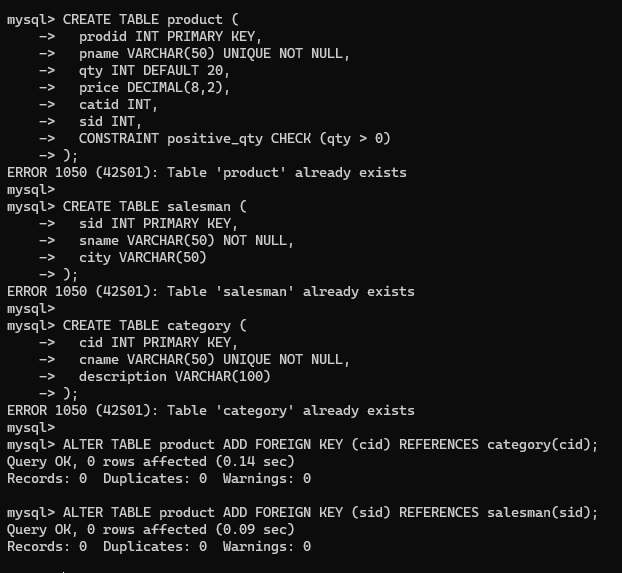
cid cname description

1 chips very crunchy

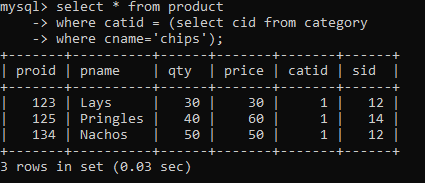
2 chocolate very chocolaty

3 snacks yummy

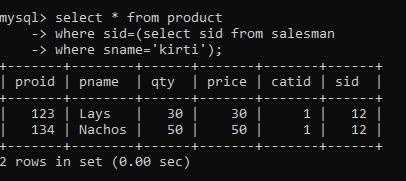
4 cold drinks thanda thanda cool cool



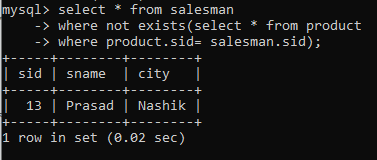
1. List all products with category chips



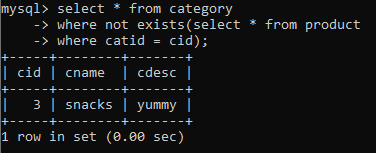
2. display all products sold by kirti



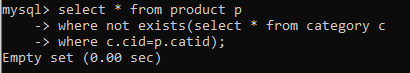
3. display all salesman who do not sold any product



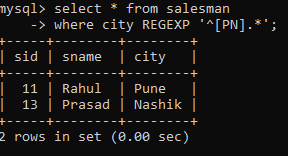
4. display all category for which no product is there



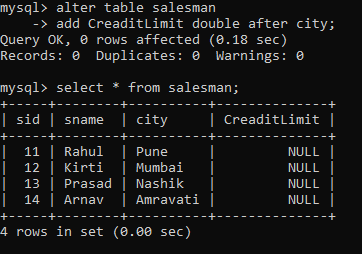
5. display all products with no category assigned



6. list all salesman who stays in city with name starts with P or N



7. add new column in salesman table by name credit limit



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