

Inspiring Excellence

Course Title: Database Management

Course Code: CSE 370 Lab Assignment no: 02

Name: Tahmid Iqbal Student ID; 21201701 Section: 06

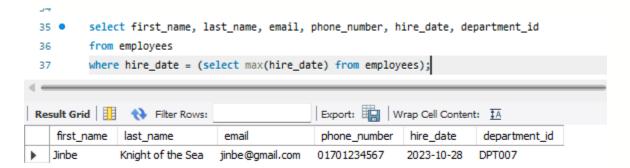
After: Table Creation and Data Insertion

employee_i	d first_name	last_name	email	phone_number	hire_date	job_id	salary	commission_pct	manager_id	department_id
▶ EMP001	Monkey D.	Luffy	luffy@gmail.com	01712345678	2023-10-19	JOB001	80000	0.050	MNG001	DPT001
EMP002	Roronoa	Zoro	zoro@yahoo.com	01723456789	2023-10-20	JOB002	70000	0.040	MNG001	DPT001
EMP003	Nami	Cat Burglar	nami@protonmail.com	01734567890	2023-10-21	JOB003	30000	0.060	MNG002	DPT002
EMP004	Usopp	Sniper King	usopp@gmail.com	01745678901	2023-10-22	JOB004	25000	0.035	MNG002	DPT002
EMP005	Sanji	Vinsmoke	sanji@yahoo.com	01756789012	2023-10-23	JOB005	65000	0.055	MNG003	DPT003
EMP006	Tony Tony	Chopper	tony@gmail.com	01767890123	2023-10-24	JOB006	20000	0.045	MNG002	DPT004
EMP007	Nico	Robin	nico@protonmail.com	01778901234	2023-10-25	JOB007	68000	0.070	MNG003	DPT005
EMP008	Franky	Cutty Flam	franky@gmail.com	01789012345	2023-10-26	JOB008	51000	0.050	MNG003	DPT006
EMP009	Brook	Soul King	brook@yahoo.com	01790123456	2023-10-27	JOB009	49000	0.045	MNG003	DPT007
EMP010	Jinbe	Knight of the Sea	jinbe@gmail.com	01701234567	2023-10-28	JOB010	54000	0.065	MNG004	DPT007
			J							

Task; 01. Find the first_name, last_name, email, phone_number, hire_date, and department id of all the employees with the latest hire date.

Command:

select first_name, last_name, email, phone_number, hire_date, department_id from employees where hire_date = (select max(hire_date) from employees);



Task 02. Find the first_name, last_name, employee_id, phone_number, salary and department_id of all the employees with the lowest salary in each department.

Command:

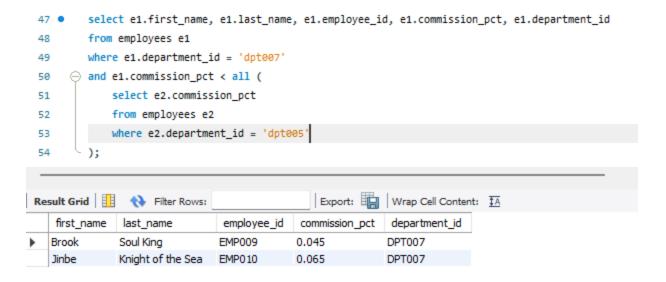
```
select e1.first_name, e1.last_name, e1.employee_id, e1.phone_number, e1.salary, e1.department_id from employees e1 where (e1.department_id, e1.salary) in ( select e2.department_id, min(e2.salary) from employees e2 group by e2.department_id );
```

```
select e1.first_name, e1.last_name, e1.employee_id, e1.phone_number, e1.salary, e1.department_id
39 •
         from employees e1
40
41
      where (e1.department_id, e1.salary) in (
             select e2.department_id, min(e2.salary)
42
             from employees e2
43
             group by e2.department_id
44
         );
45
Wrap Cell Content: $\overline{\pmathbb{T}}{A}$
   first_name
               last_name
                           employee_id
                                        phone_number
                                                        salary
                                                                department_id
  Roronoa
              Zoro
                          EMP002
                                        01723456789
                                                       70000
                                                               DPT001
                          EMP004
   Usopp
              Sniper King
                                        01745678901
                                                       25000
                                                               DPT002
   Sanji
              Vinsmoke
                          EMP005
                                        01756789012
                                                       65000
                                                               DPT003
   Tony Tony
              Chopper
                          EMP006
                                        01767890123
                                                       20000
                                                               DPT004
              Robin
                          EMP007
                                        01778901234
                                                       68000
                                                               DPT005
   Nico
   Franky
              Cutty Flam
                          EMP008
                                        01789012345
                                                       51000
                                                               DPT006
              Soul King
                          EMP009
  Brook
                                        01790123456
                                                       49000
                                                               DPT007
```

Task 03. Find the first_name, last_name, employee_id, commission_pct and department_id of all the employees in the department 'DPT007' who have a lower commission_pct than all of the employees of the department 'DPT005'.

Command:

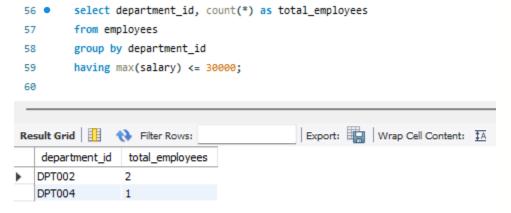
```
select e1.first_name, e1.last_name, e1.employee_id, e1.commission_pct, e1.department_id
from employees e1
where e1.department_id = 'dpt007'
and e1.commission_pct < all (
    select e2.commission_pct
    from employees e2
    where e2.department_id = 'dpt005'
);</pre>
```



Task -4. Find the department_id and total number of employees of each department which does not have a single employee under it with a salary more than 30,000.

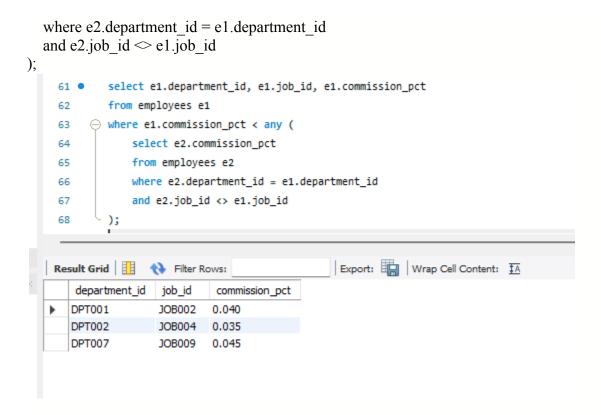
Command:

select department_id, count(*) as total_employees from employees group by department_id having max(salary) <= 30000;



Task 05. For each of the departments, find the department_id, job_id and commission_pct with commission_pct less than at least one other job_id in that department. Command:

```
select e1.department_id, e1.job_id, e1.commission_pct
from employees e1
where e1.commission_pct < any (
    select e2.commission_pct
    from employees e2
```



Task 06. Find the manager_id who does not have any employee under them with a salary less than 3500.

Command:

select manager_id from employees group by manager_id having min(salary) >= 3500;

70 71 72	<pre>from employees group by manager_id having min(salary) >= 3500;</pre>	
		_
Result Gr	id Export: Wrap Cell Content:	<u>‡A</u>
mana	ger_id	
▶ MNG0	01	
MNG0	02	
MNG0	03	
MNG0	04	
mana ▶ MNG0 MNG0 MNG0	ger_id 01 02 03	±n

Task 07. Find the first_name, last_name, employee_id, email, salary, department_id and commission_pct of the employee who has the lowest commission_pct under each manager. Command:

```
select e1.first name, e1.last name, e1.employee id, e1.email, e1.salary, e1.department id,
e1.commission pct
from employees e1
where (e1.manager id is not null) and (
  e1.commission pct = (select min(commission pct) from employees e2 where e2.manager id
= e1.manager id)
);
          select e1.first_name, e1.last_name, e1.employee_id, e1.email, e1.salary, e1.department_id, e1.commission_pct
   70 •
  71
          from employees e1
       e1.commission_pct = (select min(commission_pct) from employees e2 where e2.manager_id = e1.manager_id)
   73
         );
   74
   75
   76
  77
  Export: Wrap Cell Content: IA
     first_name
              last_name
                                                       salary
                                                             department_id
                                                                          commission_pct
                             employee_id
                                       email
                            EMP002
    Roronoa
                                       zoro@yahoo.com
                                                      70000
                                                             DPT001
                                                                         0.040
              Zoro
                            EMP004
                                                      25000 DPT002
    Usopp
                                                                         0.035
              Sniper King
                                       usopp@gmail.com
                            EMP009
    Brook
              Soul King
                                       brook@yahoo.com
                                                      49000 DPT007
                                                                         0.045
    Jinbe
              Knight of the Sea EMP010
                                                      54000 DPT007
                                                                         0.065
                                       jinbe@gmail.com
```