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**Sec: 15**

```
CREATE TABLE Employee(employee_id CHAR(10), first_name VARCHAR(20), last_name  
varchar(20), email varchar(60), phone_number char(14), hire_date date, job_id char(10), salary  
int, commission_pct decimal(5,3), manager_id char(10), department_id char(10));
```

```
insert into employee VALUES
```

```
('EMP001','Taylor', 'Otwell','otwell@laravel.com',739360,'2020-6-10','JOB001',25000, 69.99,  
'MNG001', 'DPT001'),  
(('EMP002','Ryan', 'Dahl','ryan@nodejs.org',633632,'2020-04-22','JOB002',35000, 59.99,  
'MNG002', 'DPT002'),  
(('EMP003','Brendan','Eich','eich@javascript.com',939570,'2020-05-07','JOB003',13000, 79.99,  
'MNG003', 'DPT003'),  
(('EMP004','Evan', 'You','you@vuejs.org',982630,'2020-06-11','JOB004',43000, 34.99, 'MNG004',  
'DPT004'),  
(('EMP005','Rasmus', 'Lerdorf','lerdorf@php.net',937927,'2020-06-3','JOB005',56000, 89.11,  
'MNG005', 'DPT005'),  
(('EMP006','Guido', 'Rossum','guido@python.org',968827,'2020-07-18','JOB006',65000, 46.99,  
'MNG006', 'DPT006'),  
(('EMP007','Adrian',  
'Holovaty','adrian@djangoproject.com',570724,'2020-05-07','JOB007',34000, 22.21, 'MNG007',  
'DPT007'),  
(('EMP008','Simon','Willison','simon@djangoproject.com',864615,'2020-04-30','JOB008',90000,  
42.99, 'MNG008', 'DPT008'),  
(('EMP009','James', 'Gosling','james@java.com',719491,'2020-05-18','JOB009',55000, 66.99,  
'MNG009', 'DPT009'),  
(('EMP010','Rod', 'Johnson','rod@spring.io',601744,'2020-05-18','JOB010',55000, 76.99,  
'MNG010', 'DPT010'),  
(('EMP011','Satoshi',  
'Nakamoto','nakamoto@blockchain.com',630488,'2020-05-10','JOB011',64000, 65.99,  
'MNG011', 'DPT011');
```

| employee_id | first_name | last_name | email                    | phone_number | hire_date  | job_id | salary | commission_pct | manager_id | department_id |
|-------------|------------|-----------|--------------------------|--------------|------------|--------|--------|----------------|------------|---------------|
| EMP001      | Taylor     | Otwell    | otwell@laravel.com       | 739360       | 2020-06-10 | JOB001 | 25000  | 69.990         | MNG001     | DPT001        |
| EMP002      | Ryan       | Dahl      | ryan@nodejs.org          | 633632       | 2020-04-22 | JOB002 | 35000  | 59.990         | MNG002     | DPT002        |
| EMP003      | Brendan    | Eich      | eich@javascript.com      | 939570       | 2020-05-07 | JOB003 | 13000  | 79.990         | MNG003     | DPT003        |
| EMP004      | Evan       | You       | you@vuejs.org            | 982630       | 2020-06-11 | JOB004 | 43000  | 34.990         | MNG004     | DPT004        |
| EMP005      | Rasmus     | Lerdorf   | lerdorf@php.net          | 937927       | 2020-06-03 | JOB005 | 56000  | 89.110         | MNG005     | DPT005        |
| EMP006      | Guido      | Rossum    | guido@python.org         | 968827       | 2020-07-18 | JOB006 | 65000  | 46.990         | MNG006     | DPT006        |
| EMP007      | Adrian     | Holovaty  | adrian@djangoproject.com | 570724       | 2020-05-07 | JOB007 | 34000  | 22.210         | MNG007     | DPT007        |
| EMP008      | Simon      | Willison  | simon@djangoproject.com  | 864615       | 2020-04-30 | JOB008 | 90000  | 42.990         | MNG008     | DPT008        |
| EMP009      | James      | Gosling   | james@java.com           | 719491       | 2020-05-18 | JOB009 | 55000  | 66.990         | MNG009     | DPT009        |
| EMP010      | Rod        | Johnson   | rod@spring.io            | 601744       | 2020-05-18 | JOB010 | 55000  | 76.990         | MNG010     | DPT010        |
| EMP011      | Satoshi    | Nakamoto  | nakamoto@blockchain.com  | 630488       | 2020-05-10 | JOB011 | 64000  | 65.990         | MNG011     | DPT011        |

SELECT first\_name, last\_name, email, phone\_number, hire\_date, department\_id  
from employee WHERE hire\_date=(SELECT MAX(hire\_date) FROM employee);

| first_name | last_name | email            | phone_number | hire_date  | department_id |
|------------|-----------|------------------|--------------|------------|---------------|
| Guido      | Rossum    | guido@python.org | 968827       | 2020-07-18 | DPT006        |

2.

select first\_name, last\_name, employee\_id, phone\_number,salary , department\_id from employee  
where (department\_id,salary) in (select department\_id, min(salary) from employee group by  
department\_id);

| first_name | last_name | employee_id | phone_number | salary | department_id |
|------------|-----------|-------------|--------------|--------|---------------|
| Taylor     | Otwell    | EMP001      | 739360       | 25000  | DPT001        |
| Ryan       | Dahl      | EMP002      | 633632       | 35000  | DPT002        |
| Brendan    | Eich      | EMP003      | 939570       | 13000  | DPT003        |
| Evan       | You       | EMP004      | 982630       | 43000  | DPT004        |
| Rasmus     | Lerdorf   | EMP005      | 937927       | 56000  | DPT005        |
| Guido      | Rossum    | EMP006      | 968827       | 65000  | DPT006        |
| Adrian     | Holovaty  | EMP007      | 570724       | 34000  | DPT007        |
| Simon      | Willison  | EMP008      | 864615       | 90000  | DPT008        |
| James      | Gosling   | EMP009      | 719491       | 55000  | DPT009        |
| Rod        | Johnson   | EMP010      | 601744       | 55000  | DPT010        |
| Satoshi    | Nakamoto  | EMP011      | 630488       | 64000  | DPT011        |

3.

select first\_name, last\_name, employee\_id, commission\_pct, department\_id FROM employee  
where department\_id='DPT007' AND commission\_pct<ALL(SELECT commission\_pct from  
employee WHERE department\_id='DPT005');

| first_name | last_name | employee_id | commission_pct | department_id |
|------------|-----------|-------------|----------------|---------------|
| Adrian     | Holovaty  | EMP007      | 22.210         | DPT007        |

4.

select department\_id,count(\*) as total\_employees from employee where department\_id not in  
(select department\_id from employee where salary>30000) group by department\_id;

| department_id | total_employees |
|---------------|-----------------|
| DPT001        | 1               |
| DPT003        | 1               |

5.

select distinct department\_id, job\_id, commission\_pct from employee emp001 where exists(select \* from employee emp003 where emp003.department\_id=emp001.department\_id and emp003.job\_id!=emp001.job\_id and emp001.commission\_pct<emp003.commission\_pct);

✓ MySQL returned an empty result set (i.e. zero rows). (Query took 0.0004 seconds.)

```
select distinct department_id, job_id, commission_pct from employee emp001 where exists(select * from employee emp003 where emp003.department_id=emp001.department_id and emp003.job_id!=emp001.job_id and emp001.commission_pct<emp003.commission_pct);
```

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| department_id | job_id | commission_pct |
|---------------|--------|----------------|
|---------------|--------|----------------|

6.

select distinct manager\_id from employee where manager\_id not in (select manager\_id from employee where salary<3500);

| manager_id |
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| MNG011 |
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7.

```
select first_name, last_name, employee_id, email, salary, department_id ,commission_pct from
employee where (commission_pct,manager_id ) in (select min(commission_pct ),manager_id
from employee group by manager_id);
```

| first_name | last_name | employee_id | email                    | salary | department_id | commission_pct |
|------------|-----------|-------------|--------------------------|--------|---------------|----------------|
| Taylor     | Otwell    | EMP001      | otwell@laravel.com       | 25000  | DPT001        | 69.990         |
| Ryan       | Dahl      | EMP002      | ryan@nodejs.org          | 35000  | DPT002        | 59.990         |
| Brendan    | Eich      | EMP003      | eich@javascript.com      | 13000  | DPT003        | 79.990         |
| Evan       | You       | EMP004      | you@vuejs.org            | 43000  | DPT004        | 34.990         |
| Rasmus     | Lerdorf   | EMP005      | lerdorf@php.net          | 56000  | DPT005        | 89.110         |
| Guido      | Rossum    | EMP006      | guido@python.org         | 65000  | DPT006        | 46.990         |
| Adrian     | Holovaty  | EMP007      | adrian@djangoproject.com | 34000  | DPT007        | 22.210         |
| Simon      | Willison  | EMP008      | simon@djangoproject.com  | 90000  | DPT008        | 42.990         |
| James      | Gosling   | EMP009      | james@java.com           | 55000  | DPT009        | 66.990         |
| Rod        | Johnson   | EMP010      | rod@spring.io            | 55000  | DPT010        | 76.990         |
| Satoshi    | Nakamoto  | EMP011      | nakamoto@blockchain.com  | 64000  | DPT011        | 65.990         |