MySQL Assignment

Create a Database name entri_assignment

Create a Table with name `departments`

```
Department_id (pk)  Department_name  Location_id
```

Create a Table with name `employees`

```
Employee_id  (pk)  ,first_name,last_name ,email,phone_number,hire_date,

job_id, salary, commission_pct, manager_id, department_id (fk
reference
```

```
## Insert into Departments table
 INSERT INTO departments VALUES ( 170 , 'Payroll' , 1700);
```

```
## Insert into Employees table

; INSERT INTO employees VALUES (101, 'Neena' , 'Kochhar' , 'NKOCHHAR'
, '515.123.4568' , '1989-11-21' , 'AD_VP' , 17000 , NULL , 100 , 20);

INSERT INTO employees VALUES (102 , 'Lex' , 'De Haan' , 'LDEHAAN' ,
'515.123.4569' , '1993-09-12' , 'AD_VP' , 17000 , NULL , 100 , 30);

INSERT INTO employees VALUES (104 , 'Bruce' , 'Ernst' , 'BERNST' ,
'590.423.4568' , '1991-05-21',  'IT_PROG' , 6000 , NULL , 103 , 60);
```

```
INSERT INTO employees VALUES (105 , 'David' , 'Austin' , 'DAUSTIN' ,
'590.423.4569' , '1997-06-25',  'IT_PROG' , 4800 , NULL , 103 , 60);

INSERT INTO employees VALUES (106 , 'Valli' , 'Pataballa' , 'VPATABAL'
, '590.423.4560' , '1998-02-05',  'IT_PROG' , 4800 , NULL , 103 , 40);

INSERT INTO employees VALUES (107 , 'Diana' , 'Lorentz' , 'DLORENTZ' ,
'590.423.5567' , '1999-02-09',  'IT_PROG' , 4200 , NULL , 103 , 40);

INSERT INTO employees VALUES (108 , 'Nancy' , 'Greenberg' , 'NGREENBE'
, '515.124.4569' , '1994-08-17',  'FI_MGR' , 12000 , NULL , 101 ,
100);

INSERT INTO employees VALUES (109 , 'Daniel' , 'Faviet' , 'DFAVIET' ,
'515.124.4169' , '1994-08-12',  'FI_ACCOUNT' , 9000 , NULL , 108 ,
170);

INSERT INTO employees VALUES (110 , 'John' , 'Chen' , 'JCHEN' ,
'515.124.4269' , '1997-04-09',  'FI_ACCOUNT' , 8200 , NULL , 108 ,
170);

INSERT INTO employees VALUES (111 , 'Ismael' , 'Sciarra' , 'ISCIARRA'
, '515.124.4369' , '1997-02-01',  'FI_ACCOUNT' , 7700 , NULL , 108 ,
160);

INSERT INTO employees VALUES (112 , 'Jose Manuel' , 'Urman' ,
'JMURMAN' , '515.124.4469' , '1998-06-03', 'FI_ACCOUNT' , 7800 , NULL
8 , 150);

INSERT INTO employees VALUES (114 , 'Den' , 'Raphaely' , 'DRAPHEAL' ,
'515.127.4561' , '1994-11-08',  'PU_MAN' , 11000 , NULL , 100 , 30);
```

```
INSERT INTO employees VALUES (115 , 'Alexander' , 'Khoo' , 'AKHOO' ,
'515.127.4562' , '1995-05-12',  'PU_CLERK' , 3100 , NULL , 114 , 80);

INSERT INTO employees VALUES (116 , 'Shelli' , 'Baida' , 'SBAIDA' ,
'515.127.4563' ,'1997-12-13', 'PU_CLERK' , 2900 , NULL , 114 , 70);

INSERT INTO employees VALUES (117 , 'Sigal' , 'Tobias' , 'STOBIAS' ,
'515.127.4564' , '1997-09-10', 'PU_CLERK' , 2800 , NULL , 114 , 30);

INSERT INTO employees VALUES (118 , 'Guy' , 'Himuro' , 'GHIMURO' ,
'515.127.4565' , '1998-01-02',  'PU_CLERK' , 2600 , NULL , 114 , 60);

INSERT INTO employees VALUES (119 , 'Karen' , 'Colmenares' ,
'KCOLMENA' , '515.127.4566' , '1999-04-08',  'PU_CLERK' , 2500 , NULL
, 114 , 130);

INSERT INTO employees VALUES (120 , 'Matthew' , 'Weiss' , 'MWEISS' ,
'650.123.1234' ,'1996-07-18',  'ST_MAN' , 8000 , NULL , 100 , 50);

INSERT INTO employees VALUES (122 , 'Payam' , 'Kaufling' , 'PKAUFLIN'
, '650.123.3234' ,'1995-05-01',  'ST_MAN' , 7900 , NULL , 100 , 40);

INSERT INTO employees VALUES (123 , 'Shanta' , 'Vollman' , 'SVOLLMAN'
, '650.123.4234' , '1997-10-12',  'ST_MAN' , 6500 , NULL , 100 , 50);

INSERT INTO employees VALUES (124, 'Kevin' , 'Mourgos' , 'KMOURGOS' ,
'650.123.5234' , '1999-11-12',  'ST_MAN' , 5800 , NULL , 100 , 80);

INSERT INTO employees VALUES (125, 'Julia' , 'Nayer' , 'JNAYER' ,
'650.124.1214' , '1997-07-02',  'ST_CLERK' , 3200 , NULL , 120 , 50);
```

```
INSERT INTO employees VALUES (126, 'Irene' , 'Mikkilineni' ,
'IMIKKILI' , '650.124.1224' , '1998-11-12', 'ST_CLERK' , 2700 , NULL ,
120 , 50);

INSERT INTO employees VALUES (127, 'James' , 'Landry' , 'JLANDRY' ,
'650.124.1334' , '1999-01-02' , 'ST_CLERK' , 2400 , NULL , 120 , 90);

INSERT INTO employees VALUES (128, 'Steven' , 'Markle' , 'SMARKLE' ,
'650.124.1434' , '2000-03-04' , 'ST_CLERK' , 2200 , NULL , 120 , 50);

INSERT INTO employees VALUES (130, 'Mozhe' , 'Atkinson' , 'MATKINSO' ,
'650.124.6234' , '1997-10-12' , 'ST_CLERK' , 2800 , NULL , 121 , 110);
```

Solve SQL Exercises

1. Select employees first name, last name, job_id and salary whose first name starts with alphabet S

```
mysql> select firstname,lastname,job_id,salary from employees where firstname like 'S%';
+-----------+----------+----------+---------+
| firstname | lastname | job_id   | salary  |
+-----------+----------+----------+---------+
| Shelli    | Baida    | PU_CLERK | 2900.00 |
| Sigal     | Tobias   | PU_CLERK | 2800.00 |
| Shanta    | Vollman  | ST_MAN   | 6500.00 |
| Steven    | Markle   | ST_CLERK | 2200.00 |
+-----------+----------+----------+---------+
4 rows in set (0.00 sec)
```

2. Write a query to select employee with the highest salary (using an inner query)

```
mysql> select * from employees where salary = (select max(salary) from employees);
+-------------+-----------+----------+----------+--------------+------------+--------+----------+---------------+------------+---------------+
| Employee_id | firstname | lastname | email    | phonenumber  | hire_date  | job_id | salary   | commision_pct | manager_id | Department_id |
+-------------+-----------+----------+----------+--------------+------------+--------+----------+---------------+------------+---------------+
|         101 | Neena     | Kochhar  | NKOCHHAR | 515.123.4568 | 1989-11-21 | AD_VP  | 17000.00 |          NULL |        100 |            20 |
|         102 | Lex       | De Haan  | LDEHAAN  | 515.123.4569 | 1993-09-12 | AD_VP  | 17000.00 |          NULL |        100 |            30 |
+-------------+-----------+----------+----------+--------------+------------+--------+----------+---------------+------------+---------------+
2 rows in set (0.01 sec)
```

3. Select employee with the second highest salary

```
mysql> select salary from employees order by salary desc limit 1,1;
+-----------+
| salary    |
+-----------+
| 17000.00 |
+-----------+
1 row in set (0.00 sec)
```

4. Write a query to select employees and their corresponding managers and their salaries

```
mysql> select e.employee_id as employeeid,
    -> e.firstname as employeefirstname,
    -> e.lastname as employeelastname,
    -> e.salary as employeesalary,
    -> m.employee_id as managerid,
    -> m.firstname as managerfirstname,
    -> m.lastname as managerlastname,
    -> m.salary as managersalary
    -> from employees e
    -> left join employees m on e.manager_id=m.employee_id;
+------------+------------------+------------------+----------------+-----------+------------------+-----------------+---------------+
| employeeid | employeefirstname | employeelastname | employeesalary | managerid | managerfirstname | managerlastname | managersalary |
+------------+------------------+------------------+----------------+-----------+------------------+-----------------+---------------+
|        101 | Neena             | Kochhar          |       17000.00 |      NULL | NULL             | NULL            |          NULL |
|        102 | Lex               | De Haan          |       17000.00 |      NULL | NULL             | NULL            |          NULL |
|        104 | Bruce             | Ernst            |        6000.00 |      NULL | NULL             | NULL            |          NULL |
|        105 | David             | Austin           |        4800.00 |      NULL | NULL             | NULL            |          NULL |
|        106 | Valli             | Pataballa        |        4800.00 |      NULL | NULL             | NULL            |          NULL |
|        107 | Diana             | Lorentz          |        4200.00 |      NULL | NULL             | NULL            |          NULL |
|        108 | Nancy             | Greenberg        |       12000.00 |       101 | Neena            | Kochhar         |      17000.00 |
|        109 | Daniel            | Faviet           |        9000.00 |       108 | Nancy            | Greenberg       |      12000.00 |
|        110 | John              | Chen             |        8200.00 |       108 | Nancy            | Greenberg       |      12000.00 |
|        111 | Ismael            | Sciarra          |        7700.00 |       108 | Nancy            | Greenberg       |      12000.00 |
|        112 | Jose Manuel       | Urman            |        7800.00 |      NULL | NULL             | NULL            |          NULL |
|        114 | Den               | Raphaely         |       11000.00 |      NULL | NULL             | NULL            |          NULL |
|        115 | Alexander         | Khoo             |        3100.00 |       114 | Den              | Raphaely        |      11000.00 |
|        116 | Shelli            | Baida            |        2900.00 |       114 | Den              | Raphaely        |      11000.00 |
|        117 | Sigal             | Tobias           |        2800.00 |       114 | Den              | Raphaely        |      11000.00 |
|        118 | Guy               | Himuro           |        2600.00 |       114 | Den              | Raphaely        |      11000.00 |
|        119 | Karen             | Colmenares       |        2500.00 |       114 | Den              | Raphaely        |      11000.00 |
|        120 | Matthew           | Weiss            |        8000.00 |      NULL | NULL             | NULL            |          NULL |
|        122 | Payam             | Kaufling         |        7900.00 |      NULL | NULL             | NULL            |          NULL |
|        123 | Shanta            | Vollman          |        6500.00 |      NULL | NULL             | NULL            |          NULL |
|        124 | Kevin             | Mourgos          |        5800.00 |      NULL | NULL             | NULL            |          NULL |
|        125 | Julia             | Nayer            |        3200.00 |       120 | Matthew          | Weiss           |       8000.00 |
|        126 | Irene             | Mikkilineni      |        2700.00 |       120 | Matthew          | Weiss           |       8000.00 |
|        127 | James             | Landry           |        2400.00 |       120 | Matthew          | Weiss           |       8000.00 |
|        128 | Steven            | Markle           |        2200.00 |       120 | Matthew          | Weiss           |       8000.00 |
|        130 | Mozhe             | Atkinson         |        2800.00 |      NULL | NULL             | NULL            |          NULL |
+------------+------------------+------------------+----------------+-----------+------------------+-----------------+---------------+
26 rows in set (0.00 sec)
```

5. Write a query to select employees and their corresponding managers and their salaries (SELF Join)

```
mysql> select e.employee_id as employeeid,
    -> e.firstname as employeefirstname,
    -> e.lastname as employeelastname,
    -> e.salary as employeesalary,
    -> m.employee_id as managerid,
    -> m.firstname as managerfirstname,
    -> m.lastname as managerlastname,
    -> m.salary as managersalary
    -> from employees e
    -> left join employees m on e.manager_id=m.employee_id;
+------------+-------------------+-----------------+---------------+-----------+------------------+-----------------+---------------+
| employeeid | employeefirstname | employeelastname | employeesalary | managerid | managerfirstname | managerlastname | managersalary |
+------------+-------------------+-----------------+---------------+-----------+------------------+-----------------+---------------+
|        101 | Neena             | Kochhar         |      17000.00 |      NULL | NULL             | NULL            |          NULL |
|        102 | Lex               | De Haan         |      17000.00 |      NULL | NULL             | NULL            |          NULL |
|        104 | Bruce             | Ernst           |       6000.00 |      NULL | NULL             | NULL            |          NULL |
|        105 | David             | Austin          |       4800.00 |      NULL | NULL             | NULL            |          NULL |
|        106 | Valli             | Pataballa       |       4800.00 |      NULL | NULL             | NULL            |          NULL |
|        107 | Diana             | Lorentz         |       4200.00 |      NULL | NULL             | NULL            |          NULL |
|        108 | Nancy             | Greenberg       |      12000.00 |       101 | Neena            | Kochhar         |      17000.00 |
|        109 | Daniel            | Faviet          |       9000.00 |       108 | Nancy            | Greenberg       |      12000.00 |
|        110 | John              | Chen            |       8200.00 |       108 | Nancy            | Greenberg       |      12000.00 |
|        111 | Ismael            | Sciarra         |       7700.00 |       108 | Nancy            | Greenberg       |      12000.00 |
|        112 | Jose Manuel       | Urman           |       7800.00 |      NULL | NULL             | NULL            |          NULL |
|        114 | Den               | Raphaely        |      11000.00 |      NULL | NULL             | NULL            |          NULL |
|        115 | Alexander         | Khoo            |       3100.00 |       114 | Den              | Raphaely        |      11000.00 |
|        116 | Shelli            | Baida           |       2900.00 |       114 | Den              | Raphaely        |      11000.00 |
|        117 | Sigal             | Tobias          |       2800.00 |       114 | Den              | Raphaely        |      11000.00 |
|        118 | Guy               | Himuro          |       2600.00 |       114 | Den              | Raphaely        |      11000.00 |
|        119 | Karen             | Colmenares      |       2500.00 |       114 | Den              | Raphaely        |      11000.00 |
|        120 | Matthew           | Weiss           |       8000.00 |      NULL | NULL             | NULL            |          NULL |
|        122 | Payam             | Kaufling        |       7900.00 |      NULL | NULL             | NULL            |          NULL |
|        123 | Shanta            | Vollman         |       6500.00 |      NULL | NULL             | NULL            |          NULL |
|        124 | Kevin             | Mourgos         |       5800.00 |      NULL | NULL             | NULL            |          NULL |
|        125 | Julia             | Nayer           |       3200.00 |       120 | Matthew          | Weiss           |       8000.00 |
|        126 | Irene             | Mikkilineni     |       2700.00 |       120 | Matthew          | Weiss           |       8000.00 |
|        127 | James             | Landry          |       2400.00 |       120 | Matthew          | Weiss           |       8000.00 |
|        128 | Steven            | Markle          |       2200.00 |       120 | Matthew          | Weiss           |       8000.00 |
|        130 | Mozhe             | Atkinson        |       2800.00 |      NULL | NULL             | NULL            |          NULL |
+------------+-------------------+-----------------+---------------+-----------+------------------+-----------------+---------------+
26 rows in set (0.00 sec)
```

6. Create a view for the above query

```
mysql> create view employeemanagersalary as
    -> select e.employee_id as employeeid,
    -> e.firstname as employeefirstname,
    -> e.lastname as employeelastname,
    -> e.salary as employeesalary,
    -> m.employee_id as managerid,
    -> m.firstname as managerfirstname,
    -> m.lastname as managerlastname,
    -> m.salary as managersalary
    -> from employees e
    -> left join employees m on e.manager_id=m.employee_id;
Query OK, 0 rows affected (0.03 sec)

mysql> select * from employeemanagersalary;
+------------+-------------------+-----------------+---------------+-----------+------------------+-----------------+---------------+
| employeeid | employeefirstname | employeelastname | employeesalary | managerid | managerfirstname | managerlastname | managersalary |
+------------+-------------------+-----------------+---------------+-----------+------------------+-----------------+---------------+
|        101 | Neena             | Kochhar         |      17000.00 |      NULL | NULL             | NULL            |          NULL |
|        102 | Lex               | De Haan         |      17000.00 |      NULL | NULL             | NULL            |          NULL |
|        104 | Bruce             | Ernst           |       6000.00 |      NULL | NULL             | NULL            |          NULL |
|        105 | David             | Austin          |       4800.00 |      NULL | NULL             | NULL            |          NULL |
|        106 | Valli             | Pataballa       |       4800.00 |      NULL | NULL             | NULL            |          NULL |
|        107 | Diana             | Lorentz         |       4200.00 |      NULL | NULL             | NULL            |          NULL |
|        108 | Nancy             | Greenberg       |      12000.00 |       101 | Neena            | Kochhar         |      17000.00 |
|        109 | Daniel            | Faviet          |       9000.00 |       108 | Nancy            | Greenberg       |      12000.00 |
|        110 | John              | Chen            |       8200.00 |       108 | Nancy            | Greenberg       |      12000.00 |
|        111 | Ismael            | Sciarra         |       7700.00 |       108 | Nancy            | Greenberg       |      12000.00 |
|        112 | Jose Manuel       | Urman           |       7800.00 |      NULL | NULL             | NULL            |          NULL |
|        114 | Den               | Raphaely        |      11000.00 |      NULL | NULL             | NULL            |          NULL |
|        115 | Alexander         | Khoo            |       3100.00 |       114 | Den              | Raphaely        |      11000.00 |
|        116 | Shelli            | Baida           |       2900.00 |       114 | Den              | Raphaely        |      11000.00 |
|        117 | Sigal             | Tobias          |       2800.00 |       114 | Den              | Raphaely        |      11000.00 |
|        118 | Guy               | Himuro          |       2600.00 |       114 | Den              | Raphaely        |      11000.00 |
|        119 | Karen             | Colmenares      |       2500.00 |       114 | Den              | Raphaely        |      11000.00 |
|        120 | Matthew           | Weiss           |       8000.00 |      NULL | NULL             | NULL            |          NULL |
|        122 | Payam             | Kaufling        |       7900.00 |      NULL | NULL             | NULL            |          NULL |
|        123 | Shanta            | Vollman         |       6500.00 |      NULL | NULL             | NULL            |          NULL |
|        124 | Kevin             | Mourgos         |       5800.00 |      NULL | NULL             | NULL            |          NULL |
|        125 | Julia             | Nayer           |       3200.00 |       120 | Matthew          | Weiss           |       8000.00 |
|        126 | Irene             | Mikkilineni     |       2700.00 |       120 | Matthew          | Weiss           |       8000.00 |
|        127 | James             | Landry          |       2400.00 |       120 | Matthew          | Weiss           |       8000.00 |
|        128 | Steven            | Markle          |       2200.00 |       120 | Matthew          | Weiss           |       8000.00 |
|        130 | Mozhe             | Atkinson        |       2800.00 |      NULL | NULL             | NULL            |          NULL |
```

7. Write a query to show the count of employees under each manager in descending order (from view)

```
mysql> select managerid,
    -> managerfirstname,
    -> managerlastname,
    -> count(employeeid) as employeecount
    -> from employeemanagersalary
    -> where managerid is not null
    -> group by managerid, managerfirstname,managerlastname
    -> order by employeecount desc;
+-----------+------------------+-----------------+---------------+
| managerid | managerfirstname | managerlastname | employeecount |
+-----------+------------------+-----------------+---------------+
|       114 | Den              | Raphaely        |             5 |
|       120 | Matthew          | Weiss           |             4 |
|       108 | Nancy            | Greenberg       |             3 |
|       101 | Neena            | Kochhar         |             1 |
+-----------+------------------+-----------------+---------------+
4 rows in set (0.01 sec)
```

8. Find the count of employees in each department

```
mysql> select department_id,count(*) as employee_count from employees group by department_id order by employee_count;
+---------------+----------------+
| department_id | employee_count |
+---------------+----------------+
|            20 |              1 |
|            70 |              1 |
|            90 |              1 |
|           100 |              1 |
|           110 |              1 |
|           130 |              1 |
|           150 |              1 |
|           160 |              1 |
|            80 |              2 |
|           170 |              2 |
|            30 |              3 |
|            40 |              3 |
|            60 |              3 |
|            50 |              5 |
+---------------+----------------+
14 rows in set (0.00 sec)
```

9. Get the count of employees hired year wise

```
mysql> select year(hire_date) as hire_year, count(*) as employee_count from employees group by (hire_date) order by hire_year;
+-----------+----------------+
| hire_year | employee_count |
+-----------+----------------+
|      1989 |              1 |
|      1991 |              1 |
|      1993 |              1 |
|      1994 |              1 |
|      1994 |              1 |
|      1994 |              1 |
|      1995 |              1 |
|      1995 |              1 |
|      1996 |              1 |
|      1997 |              1 |
|      1997 |              1 |
|      1997 |              1 |
|      1997 |              1 |
|      1997 |              1 |
|      1997 |              2 |
|      1997 |              1 |
|      1998 |              1 |
|      1998 |              1 |
|      1998 |              1 |
|      1998 |              1 |
|      1999 |              1 |
|      1999 |              1 |
|      1999 |              1 |
|      1999 |              1 |
|      2000 |              1 |
+-----------+----------------+
25 rows in set (0.01 sec)
```

10 . create a stored procedure to get the " Get the count of employees hired in the input year"(IN year , OUT count)

11.Select the employees whose first_name contains "an"

```
mysql> select * from employees where firstname like'%an%';
+-------------+-------------+----------+----------+--------------+-------------+------------+----------+----------------+------------+---------------+
| Employee_id | firstname   | lastname | email    | phonenumber  | hire_date   | job_id     | salary   | commision_pct | manager_id | Department_id |
+-------------+-------------+----------+----------+--------------+-------------+------------+----------+----------------+------------+---------------+
|         107 | Diana       | Lorentz  | DLORENTZ | 590.423.5567 | 1999-02-09 | IT_PROG    |  4200.00 |           NULL |        103 |            40 |
|         108 | Nancy       | Greenberg | NGREENBE | 515.124.4569 | 1994-08-17 | FI_MGR     | 12000.00 |           NULL |        101 |           100 |
|         109 | Daniel      | Faviet   | DFAVIET  | 515.124.4169 | 1994-08-12 | FI_ACCOUNT |  9000.00 |           NULL |        108 |           170 |
|         112 | Jose Manuel | Urman    | JMURMAN  | 515.124.4469 | 1998-06-03 | FI_ACCOUNT |  7800.00 |           NULL |          8 |           150 |
|         115 | Alexander   | Khoo     | AKHOO    | 515.127.4562 | 1995-05-12 | PU_CLERK   |  3100.00 |           NULL |        114 |            80 |
|         123 | Shanta      | Vollman  | SVOLLMAN | 650.123.4234 | 1997-10-12 | ST_MAN     |  6500.00 |           NULL |        100 |            50 |
+-------------+-------------+----------+----------+--------------+-------------+------------+----------+----------------+------------+---------------+
6 rows in set (0.00 sec)
```

12. Select employee first name and the corresponding phone number in the format (_ _ _)-(_ _ _)-(_ _ _ _)

13. Find the employees who joined in August, 1994.

```
mysql> select * from employees where year (hire_date)=1994 and month(hire_date) = 8;
+-------------+-----------+----------+----------+--------------+-------------+------------+----------+----------------+------------+---------------+
| Employee_id | firstname | lastname | email    | phonenumber  | hire_date   | job_id     | salary   | commision_pct | manager_id | Department_id |
+-------------+-----------+----------+----------+--------------+-------------+------------+----------+----------------+------------+---------------+
|         108 | Nancy     | Greenberg | NGREENBE | 515.124.4569 | 1994-08-17 | FI_MGR     | 12000.00 |           NULL |        101 |           100 |
|         109 | Daniel    | Faviet   | DFAVIET  | 515.124.4169 | 1994-08-12 | FI_ACCOUNT |  9000.00 |           NULL |        108 |           170 |
+-------------+-----------+----------+----------+--------------+-------------+------------+----------+----------------+------------+---------------+
2 rows in set (0.01 sec)
```

14. Find the maximum salary from each department.

```
mysql> select department_id,
    -> max(salary) as max_salary
    -> from employees
    -> group by employee_id;
+---------------+------------+
| department_id | max_salary |
+---------------+------------+
|            20 |   17000.00 |
|            30 |   17000.00 |
|            60 |    6000.00 |
|            60 |    4800.00 |
|            40 |    4800.00 |
|            40 |    4200.00 |
|           100 |   12000.00 |
|           170 |    9000.00 |
|           170 |    8200.00 |
|           160 |    7700.00 |
|           150 |    7800.00 |
|            30 |   11000.00 |
|            80 |    3100.00 |
|            70 |    2900.00 |
|            30 |    2800.00 |
|            60 |    2600.00 |
|           130 |    2500.00 |
|            50 |    8000.00 |
|            40 |    7900.00 |
|            50 |    6500.00 |
|            80 |    5800.00 |
|            50 |    3200.00 |
|            50 |    2700.00 |
|            90 |    2400.00 |
|            50 |    2200.00 |
|           110 |    2800.00 |
+---------------+------------+
26 rows in set (0.01 sec)
```

15.Write a SQL query to display the 5 least earning employees

```
mysql> select * from employees order by salary asc limit 5;
+-------------+-----------+------------+----------+--------------+------------+----------+---------+---------------+------------+---------------+
| Employee_id | firstname | lastname   | email    | phonenumber  | hire_date  | job_id   | salary  | commision_pct | manager_id | Department_id |
+-------------+-----------+------------+----------+--------------+------------+----------+---------+---------------+------------+---------------+
|         128 | Steven    | Markle     | SMARKLE  | 650.124.1434 | 2000-03-04 | ST_CLERK | 2200.00 |          NULL |        120 |            50 |
|         127 | James     | Landry     | JLANDRY  | 650.124.1334 | 1999-01-02 | ST_CLERK | 2400.00 |          NULL |        120 |            90 |
|         119 | Karen     | Colmenares | KCOLMENA | 515.127.4566 | 1999-04-08 | PU_CLERK | 2500.00 |          NULL |        114 |           130 |
|         118 | Guy       | Himuro     | GHIMURO  | 515.127.4565 | 1998-01-02 | PU_CLERK | 2600.00 |          NULL |        114 |            60 |
|         126 | Irene     | Mikkilineni| IMIKKILI | 650.124.1224 | 1998-11-12 | ST_CLERK | 2700.00 |          NULL |        120 |            50 |
+-------------+-----------+------------+----------+--------------+------------+----------+---------+---------------+------------+---------------+
5 rows in set (0.00 sec)
```

16. Find the employees hired in the 80s

```
mysql> select * from employees where year (hire_date)>=1980 and year(hire_date)<=1990;
+-------------+-----------+----------+----------+--------------+------------+--------+---------+--------------+------------+---------------+
| Employee_id | firstname | lastname | email    | phonenumber  | hire_date  | job_id | salary  | commision_pct | manager_id | Department_id |
+-------------+-----------+----------+----------+--------------+------------+--------+---------+--------------+------------+---------------+
|         101 | Neena     | Kochhar  | NKOCHHAR | 515.123.4568 | 1989-11-21 | AD_VP  | 17000.00 |         NULL |        100 |            20 |
+-------------+-----------+----------+----------+--------------+------------+--------+---------+--------------+------------+---------------+
1 row in set (0.00 sec)
```

17. Find the employees who joined the company after 15th of the month

```
mysql> select * from employees where day(hire_date)>15;
+-------------+-----------+-----------+----------+--------------+------------+---------+----------+--------------+------------+---------------+
| Employee_id | firstname | lastname  | email    | phonenumber  | hire_date  | job_id  | salary   | commision_pct | manager_id | Department_id |
+-------------+-----------+-----------+----------+--------------+------------+---------+----------+--------------+------------+---------------+
|         101 | Neena     | Kochhar   | NKOCHHAR | 515.123.4568 | 1989-11-21 | AD_VP   | 17000.00 |         NULL |        100 |            20 |
|         104 | Bruce     | Ernst     | BERNST   | 590.423.4568 | 1991-05-21 | IT_PROG |  6000.00 |         NULL |        103 |            60 |
|         105 | David     | Austin    | DAUSTIN  | 590.423.4569 | 1997-06-25 | IT_PROG |  4800.00 |         NULL |        103 |            60 |
|         108 | Nancy     | Greenberg | NGREENBE | 515.124.4569 | 1994-08-17 | FI_MGR  | 12000.00 |         NULL |        101 |           100 |
|         120 | Matthew   | Weiss     | MWEISS   | 650.123.1234 | 1996-07-18 | ST_MAN  |  8000.00 |         NULL |        100 |            50 |
+-------------+-----------+-----------+----------+--------------+------------+---------+----------+--------------+------------+---------------+
5 rows in set (0.00 sec)
```