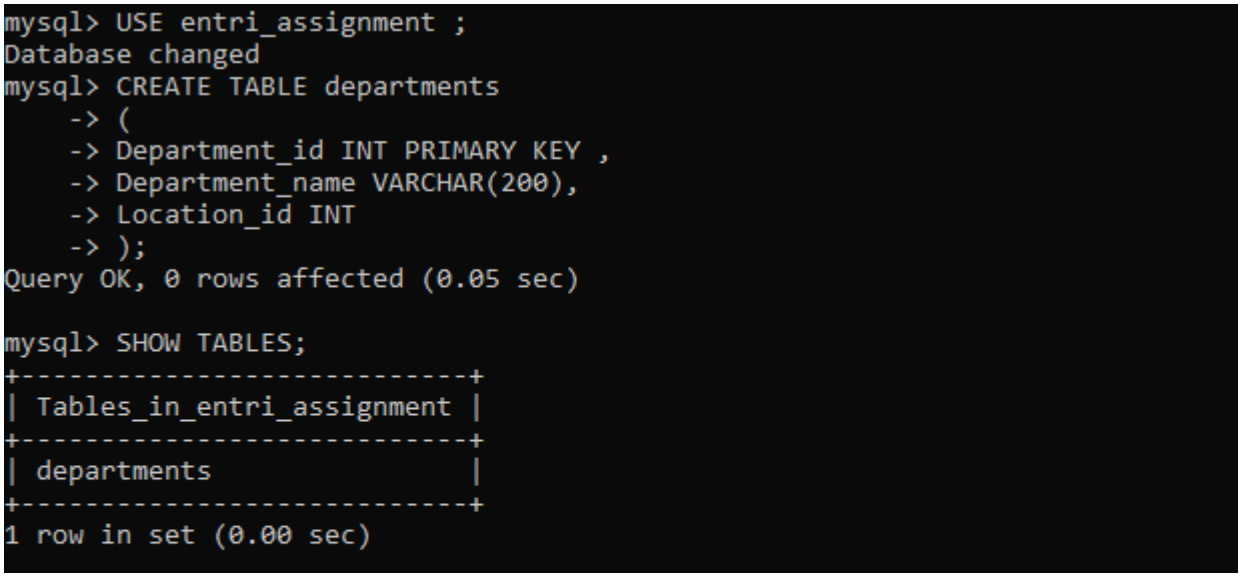
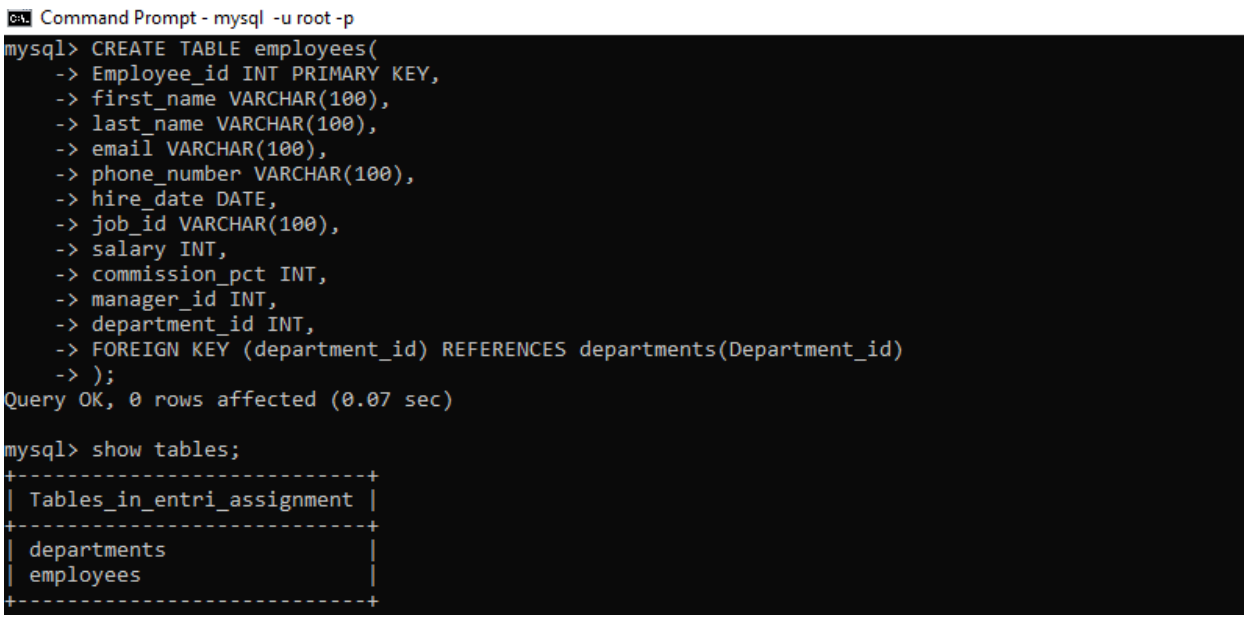
Creating database

Creating tables





Inserting values

Command Prompt - mysql -u root -p

```
+----------------------------+
2 rows in set (0.00 sec)

mysql> INSERT INTO departments VALUES ( 20,'Marketing',  180),
    -> ( 30,'Purchasing',  1700),
    -> ( 40, 'Human Resources',  2400),
    -> ( 50, 'Shipping',  1500),
    -> ( 60 , 'IT',  1400),
    -> ( 70, 'Public Relations',  2700),
    -> ( 80 , 'Sales',  2500 ),
    -> ( 90 , 'Executive',  1700),
    -> ( 100 , 'Finance',  1700),
    -> ( 110 , 'Accounting',  1700),
    -> ( 120 , 'Treasury' ,  1700),
    -> ( 130 , 'Corporate Tax' ,  1700 ),
    -> ( 140, 'Control And Credit' ,  1700),
    -> ( 150 , 'Shareholder Services', 1700),
    -> ( 160 , 'Benefits', 1700),
    -> ( 170 , 'Payroll' , 1700);
Query OK, 16 rows affected (0.02 sec)
Records: 16  Duplicates: 0  Warnings: 0

mysql> SELECT *FROM departments;
+---------------+----------------------+-------------+
| Department_id | Department_name      | Location_id |
+---------------+----------------------+-------------+
|            20 | Marketing            |         180 |
|            30 | Purchasing           |        1700 |
|            40 | Human Resources      |        2400 |
|            50 | Shipping             |        1500 |
|            60 | IT                   |        1400 |
|            70 | Public Relations     |        2700 |
|            80 | Sales                |        2500 |
|            90 | Executive            |        1700 |
|           100 | Finance              |        1700 |
|           110 | Accounting           |        1700 |
|           120 | Treasury             |        1700 |
|           130 | Corporate Tax        |        1700 |
|           140 | Control And Credit   |        1700 |
|           150 | Shareholder Services |        1700 |
|           160 | Benefits             |        1700 |
|           170 | Payroll              |        1700 |
+---------------+----------------------+-------------+
16 rows in set (0.00 sec)
```

```
mysql> INSERT INTO employees VALUES (100, 'Steven', 'King', 'SKING', '515.123.4567', '1987-06-17' , 'AD_PRES', 24000 , NULL, NULL, 20),
    -> (101, 'Neena' , 'Kochhar' , 'NKOCHHAR' , '515.123.4568' , '1989-11-21' , 'AD_VP' , 17000 , NULL , 100 , 20),
    -> (102 , 'Lex' , 'De Haan' , 'LDEHAAN' , '515.123.4569' , '1993-09-12' , 'AD_VP' , 17000 , NULL , 100 , 30),
    -> (103 , 'Alexander' , 'Hunold' , 'AHUNOLD' , '590.423.4567' , '1990-09-30', 'IT_PROG' , 9000 , NULL , 102 , 60),
    -> (104 , 'Bruce' , 'Ernst' , 'BERNST' , '590.423.4568' , '1991-05-21',  'IT_PROG' , 6000 , NULL , 103 , 60),
    -> (105 , 'David' , 'Austin' , 'DAUSTIN' , '590.423.4569' , '1997-06-25',  'IT_PROG' , 4800 , NULL , 103 , 60),
    -> (106 , 'Valli' , 'Pataballa' , 'VPATABAL' , '590.423.4560' , '1998-02-05',  'IT_PROG' , 4800 , NULL , 103 , 40),
    -> (107 , 'Diana' , 'Lorentz' , 'DLORENTZ' , '590.423.5567' , '1999-02-09',  'IT_PROG' , 4200 , NULL , 103 , 40),
    -> (108 , 'Nancy' , 'Greenberg' , 'NGREENBE' , '515.124.4569' , '1994-08-17',  'FI_MGR' , 12000 , NULL , 101 , 100),
    -> (109 , 'Daniel' , 'Faviet' , 'DFAVIET' , '515.124.4169' , '1994-08-12',  'FI_ACCOUNT' , 9000 , NULL , 108 , 170),
    -> (110 , 'John' , 'Chen' , 'JCHEN' , '515.124.4269' , '1997-04-09',  'FI_ACCOUNT' , 8200 , NULL , 108 , 170),
    -> (111 , 'Ismael' , 'Sciarra' , 'ISCIARRA' , '515.124.4369' , '1997-02-01',  'FI_ACCOUNT' , 7700 , NULL , 108 , 160),
    -> (112 , 'Jose Manuel' , 'Urman' , 'JMURMAN' , '515.124.4469' , '1998-06-03', 'FI_ACCOUNT' , 7800 , NULL , 108 , 150),
    -> (113 , 'Luis' , 'Popp' , 'LPOPP' , '515.124.4567' , '1999-12-07',  'FI_ACCOUNT' , 6900 , NULL , 108 , 140),
    -> (114 , 'Den' , 'Raphaely' , 'DRAPHEAL' , '515.127.4561' , '1994-11-08',  'PU_MAN' , 11000 , NULL , 100 , 30),
    -> (115 , 'Alexander' , 'Khoo' , 'AKHOO' , '515.127.4562' , '1995-05-12',  'PU_CLERK' , 3100 , NULL , 114 , 80),
    -> (116 , 'Shelli' , 'Baida' , 'SBAIDA' , '515.127.4563' ,'1997-12-13', 'PU_CLERK' , 2900 , NULL , 114 , 70),
    -> (117 , 'Sigal' , 'Tobias' , 'STOBIAS' , '515.127.4564' , '1997-09-10', 'PU_CLERK' , 2800 , NULL , 114 , 30),
    -> (118 , 'Guy' , 'Himuro' , 'GHIMURO' , '515.127.4565' , '1998-01-02',  'PU_CLERK' , 2600 , NULL , 114 , 60),
    -> (119 , 'Karen' , 'Colmenares' , 'KCOLMENA' , '515.127.4566' , '1999-04-08',  'PU_CLERK' , 2500 , NULL , 114 , 130),
    -> (120 , 'Matthew' , 'Weiss' , 'MWEISS' , '650.123.1234' ,'1996-07-18',  'ST_MAN' , 8000 , NULL , 100 , 50),
    -> (121 , 'Adam' , 'Fripp' , 'AFRIPP' , '650.123.2234' , '1997-08-09',  'ST_MAN' , 8200 , NULL , 100 , 50),
    -> (122 , 'Payam' , 'Kaufling' , 'PKAUFLIN' , '650.123.3234' ,'1995-05-01',  'ST_MAN' , 7900 , NULL , 100 , 40),
    -> (123 , 'Shanta' , 'Vollman' , 'SVOLLMAN' , '650.123.4234' , '1997-10-12',  'ST_MAN' , 6500 , NULL , 100 , 50),
    -> (124, 'Kevin' , 'Mourgos' , 'KMOURGOS' , '650.123.5234' , '1999-11-12',  'ST_MAN' , 5800 , NULL , 100 , 80),
    -> (125, 'Julia' , 'Nayer' , 'JNAYER' , '650.124.1214' , '1997-07-02',  'ST_CLERK' , 3200 , NULL , 120 , 50),
    -> (126, 'Irene' , 'Mikkilineni' , 'IMIKKILI' , '650.124.1224' , '1998-11-12', 'ST_CLERK' , 2700 , NULL , 120 , 50),
    -> (127, 'James' , 'Landry' , 'JLANDRY' , '650.124.1334' , '1999-01-02' , 'ST_CLERK' , 2400 , NULL , 120 , 90),
    -> (128, 'Steven' , 'Markle' , 'SMARKLE' , '650.124.1434' , '2000-03-04' , 'ST_CLERK' , 2200 , NULL , 120 , 50),
    -> (129, 'Laura' , 'Bissot' , 'LBISSOT' , '650.124.5234' ,'1997-09-10' , 'ST_CLERK' , 3300 , NULL , 121 , 50),
    -> (130, 'Mozhe' , 'Atkinson' , 'MATKINSO' , '650.124.6234' , '1997-10-12' , 'ST_CLERK' , 2800 , NULL , 121 , 110);
Query OK, 31 rows affected (0.01 sec)
Records: 31  Duplicates: 0  Warnings: 0
```

```
mysql> SELECT *FROM employees;
+-------------+-------------+-------------+----------+--------------+------------+------------+--------+----------------+------------+---------------+
| Employee_id | first_name  | last_name   | email    | phone_number | hire_date  | job_id     | salary | commission_pct | manager_id | department_id |
+-------------+-------------+-------------+----------+--------------+------------+------------+--------+----------------+------------+---------------+
|         100 | Steven      | King        | SKING    | 515.123.4567 | 1987-06-17 | AD_PRES    |  24000 |           NULL |       NULL |            20 |
|         101 | Neena       | Kochhar     | NKOCHHAR | 515.123.4568 | 1989-11-21 | AD_VP      |  17000 |           NULL |        100 |            20 |
|         102 | Lex         | De Haan     | LDEHAAN  | 515.123.4569 | 1993-09-12 | AD_VP      |  17000 |           NULL |        100 |            30 |
|         103 | Alexander   | Hunold      | AHUNOLD  | 590.423.4567 | 1990-09-30 | IT_PROG    |   9000 |           NULL |        102 |            60 |
|         104 | Bruce       | Ernst       | BERNST   | 590.423.4568 | 1991-05-21 | IT_PROG    |   6000 |           NULL |        103 |            60 |
|         105 | David       | Austin      | DAUSTIN  | 590.423.4569 | 1997-06-25 | IT_PROG    |   4800 |           NULL |        103 |            60 |
|         106 | Valli       | Pataballa   | VPATABAL | 590.423.4560 | 1998-02-05 | IT_PROG    |   4800 |           NULL |        103 |            40 |
|         107 | Diana       | Lorentz     | DLORENTZ | 590.423.5567 | 1999-02-09 | IT_PROG    |   4200 |           NULL |        103 |            40 |
|         108 | Nancy       | Greenberg   | NGREENBE | 515.124.4569 | 1994-08-17 | FI_MGR     |  12000 |           NULL |        101 |           100 |
|         109 | Daniel      | Faviet      | DFAVIET  | 515.124.4169 | 1994-08-12 | FI_ACCOUNT |   9000 |           NULL |        108 |           170 |
|         110 | John        | Chen        | JCHEN    | 515.124.4269 | 1997-04-09 | FI_ACCOUNT |   8200 |           NULL |        108 |           170 |
|         111 | Ismael      | Sciarra     | ISCIARRA | 515.124.4369 | 1997-02-01 | FI_ACCOUNT |   7700 |           NULL |        108 |           160 |
|         112 | Jose Manuel | Urman       | JMURMAN  | 515.124.4469 | 1998-06-03 | FI_ACCOUNT |   7800 |           NULL |        108 |           150 |
|         113 | Luis        | Popp        | LPOPP    | 515.124.4567 | 1999-12-07 | FI_ACCOUNT |   6900 |           NULL |        108 |           140 |
|         114 | Den         | Raphaely    | DRAPHEAL | 515.127.4561 | 1994-11-08 | PU_MAN     |  11000 |           NULL |        100 |            30 |
|         115 | Alexander   | Khoo        | AKHOO    | 515.127.4562 | 1995-05-12 | PU_CLERK   |   3100 |           NULL |        114 |            80 |
|         116 | Shelli      | Baida       | SBAIDA   | 515.127.4563 | 1997-12-13 | PU_CLERK   |   2900 |           NULL |        114 |            70 |
|         117 | Sigal       | Tobias      | STOBIAS  | 515.127.4564 | 1997-09-10 | PU_CLERK   |   2800 |           NULL |        114 |            30 |
|         118 | Guy         | Himuro      | GHIMURO  | 515.127.4565 | 1998-01-02 | PU_CLERK   |   2600 |           NULL |        114 |            60 |
|         119 | Karen       | Colmenares  | KCOLMENA | 515.127.4566 | 1999-04-08 | PU_CLERK   |   2500 |           NULL |        114 |           130 |
|         120 | Matthew     | Weiss       | MWEISS   | 650.123.1234 | 1996-07-18 | ST_MAN     |   8000 |           NULL |        100 |            50 |
|         121 | Adam        | Fripp       | AFRIPP   | 650.123.2234 | 1997-08-09 | ST_MAN     |   8200 |           NULL |        100 |            50 |
|         122 | Payam       | Kaufling    | PKAUFLIN | 650.123.3234 | 1995-05-01 | ST_MAN     |   7900 |           NULL |        100 |            40 |
|         123 | Shanta      | Vollman     | SVOLLMAN | 650.123.4234 | 1997-10-12 | ST_MAN     |   6500 |           NULL |        100 |            50 |
|         124 | Kevin       | Mourgos     | KMOURGOS | 650.123.5234 | 1999-11-12 | ST_MAN     |   5800 |           NULL |        100 |            80 |
|         125 | Julia       | Nayer       | JNAYER   | 650.124.1214 | 1997-07-02 | ST_CLERK   |   3200 |           NULL |        120 |            50 |
|         126 | Irene       | Mikkilineni | IMIKKILI | 650.124.1224 | 1998-11-12 | ST_CLERK   |   2700 |           NULL |        120 |            50 |
|         127 | James       | Landry      | JLANDRY  | 650.124.1334 | 1999-01-02 | ST_CLERK   |   2400 |           NULL |        120 |            90 |
|         128 | Steven      | Markle      | SMARKLE  | 650.124.1434 | 2000-03-04 | ST_CLERK   |   2200 |           NULL |        120 |            50 |
|         129 | Laura       | Bissot      | LBISSOT  | 650.124.5234 | 1997-09-10 | ST_CLERK   |   3300 |           NULL |        121 |            50 |
|         130 | Mozhe       | Atkinson    | MATKINSO | 650.124.6234 | 1997-10-12 | ST_CLERK   |   2800 |           NULL |        121 |           110 |
+-------------+-------------+-------------+----------+--------------+------------+------------+--------+----------------+------------+---------------+
31 rows in set (0.00 sec)
```

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

Command Prompt - mysql -u root -p

```
mysql> SELECT first_name ,last_name ,job_id,salary
    -> FROM employees WHERE first_name LIKE 's%';
+------------+-----------+----------+--------+
| first_name | last_name | job_id   | salary |
+------------+-----------+----------+--------+
| Steven     | King      | AD_PRES  |  24000 |
| Shelli     | Baida     | PU_CLERK |   2900 |
| Sigal      | Tobias    | PU_CLERK |   2800 |
| Shanta     | Vollman   | ST_MAN   |   6500 |
| Steven     | Markle    | ST_CLERK |   2200 |
+------------+-----------+----------+--------+
5 rows in set (0.00 sec)

mysql>
```

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

Command Prompt - mysql -u root -p

```
limit 1' at line 2
mysql> SELECT * FROM employees
    ->  ORDER BY salary DESC
    -> LIMIT 1;
+-------------+------------+-----------+-------+--------------+------------+---------+--------+----------------+------------+---------------+
| Employee_id | first_name | last_name | email | phone_number | hire_date  | job_id  | salary | commission_pct | manager_id | department_id |
+-------------+------------+-----------+-------+--------------+------------+---------+--------+----------------+------------+---------------+
|         100 | Steven     | King      | SKING | 515.123.4567 | 1987-06-17 | AD_PRES |  24000 |           NULL |       NULL |            20 |
+-------------+------------+-----------+-------+--------------+------------+---------+--------+----------------+------------+---------------+
1 row in set (0.00 sec)

mysql>
```

```
mysql> SELECT *
    -> FROM employees
    -> WHERE salary = (SELECT MAX(salary) FROM employees);
+-------------+------------+-----------+-------+--------------+------------+---------+--------+----------------+------------+---------------+
| Employee_id | first_name | last_name | email | phone_number | hire_date  | job_id  | salary | commission_pct | manager_id | department_id |
+-------------+------------+-----------+-------+--------------+------------+---------+--------+----------------+------------+---------------+
|         100 | Steven     | King      | SKING | 515.123.4567 | 1987-06-17 | AD_PRES |  24000 |           NULL |       NULL |            20 |
+-------------+------------+-----------+-------+--------------+------------+---------+--------+----------------+------------+---------------+
1 row in set (0.01 sec)
```

3. Select employee with the second highest salary

```
mysql> SELECT * FROM employees
    -> ORDER BY salary DESC
    -> LIMIT 1,1;
+-------------+------------+-----------+---------+--------------+-------------+--------+--------+----------------+------------+---------------+
| Employee_id | first_name | last_name | email   | phone_number | hire_date   | job_id | salary | commission_pct | manager_id | department_id |
+-------------+------------+-----------+---------+--------------+-------------+--------+--------+----------------+------------+---------------+
|         101 | Neena      | Kochhar   | NKOCHHAR | 515.123.4568 | 1989-11-21 | AD_VP  |  17000 |           NULL |        100 |            20 |
+-------------+------------+-----------+---------+--------------+-------------+--------+--------+----------------+------------+---------------+
1 row in set (0.00 sec)

mysql>
```

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

```
mysql> select first_name ,last_name ,manager_id,salary from employees;
+-------------+-------------+------------+--------+
| first_name  | last_name   | manager_id | salary |
+-------------+-------------+------------+--------+
| Steven      | King        |       NULL |  24000 |
| Neena       | Kochhar     |        100 |  17000 |
| Lex         | De Haan     |        100 |  17000 |
| Alexander   | Hunold      |        102 |   9000 |
| Bruce       | Ernst       |        103 |   6000 |
| David       | Austin      |        103 |   4800 |
| Valli       | Pataballa   |        103 |   4800 |
| Diana       | Lorentz     |        103 |   4200 |
| Nancy       | Greenberg   |        101 |  12000 |
| Daniel      | Faviet      |        108 |   9000 |
| John        | Chen        |        108 |   8200 |
| Ismael      | Sciarra     |        108 |   7700 |
| Jose Manuel | Urman       |        108 |   7800 |
| Luis        | Popp        |        108 |   6900 |
| Den         | Raphaely    |        100 |  11000 |
| Alexander   | Khoo        |        114 |   3100 |
| Shelli      | Baida       |        114 |   2900 |
| Sigal       | Tobias      |        114 |   2800 |
| Guy         | Himuro      |        114 |   2600 |
| Karen       | Colmenares  |        114 |   2500 |
| Matthew     | Weiss       |        100 |   8000 |
| Adam        | Fripp       |        100 |   8200 |
| Payam       | Kaufling    |        100 |   7900 |
| Shanta      | Vollman     |        100 |   6500 |
| Kevin       | Mourgos     |        100 |   5800 |
| Julia       | Nayer       |        120 |   3200 |
| Irene       | Mikkilineni |        120 |   2700 |
| James       | Landry      |        120 |   2400 |
| Steven      | Markle      |        120 |   2200 |
| Laura       | Bissot      |        121 |   3300 |
| Mozhe       | Atkinson    |        121 |   2800 |
+-------------+-------------+------------+--------+
31 rows in set (0.00 sec)
```

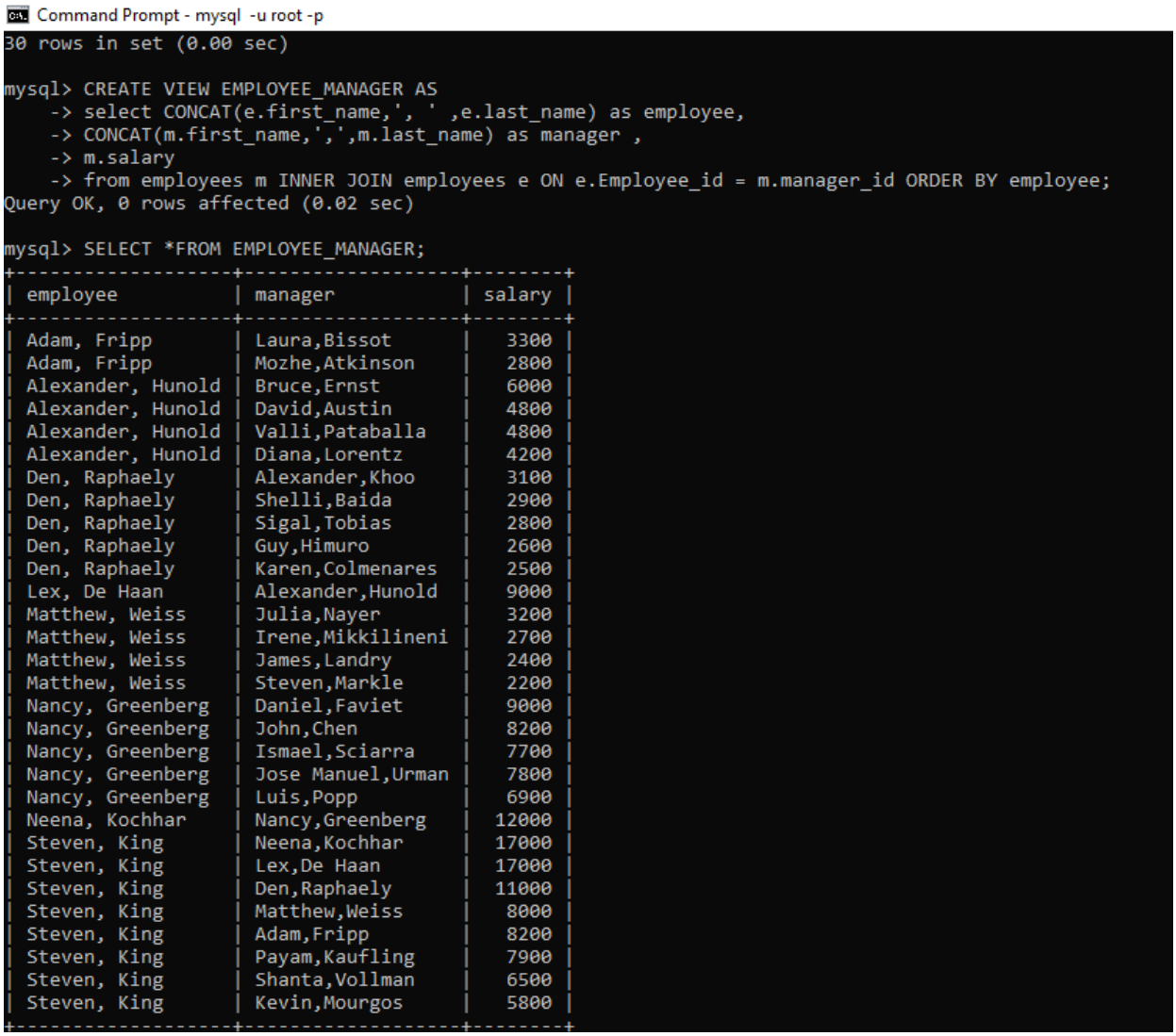
5. Write a query to select employees and their corresponding managers and their salaries (SELF Join)

Command Prompt - mysql -u root -p

```
+-------------------+-------------------+--------+
30 rows in set (0.00 sec)

mysql> select CONCAT(e.first_name,', ' ,e.last_name) as employee,
    -> CONCAT(m.first_name,',',m.last_name) as manager ,
    -> m.salary
    -> from employees m INNER JOIN employees e ON e.Employee_id = m.manager_id ORDER BY employee;
+-------------------+-------------------+--------+
| employee          | manager           | salary |
+-------------------+-------------------+--------+
| Adam, Fripp       | Laura,Bissot      |   3300 |
| Adam, Fripp       | Mozhe,Atkinson    |   2800 |
| Alexander, Hunold | Bruce,Ernst       |   6000 |
| Alexander, Hunold | David,Austin      |   4800 |
| Alexander, Hunold | Valli,Pataballa   |   4800 |
| Alexander, Hunold | Diana,Lorentz     |   4200 |
| Den, Raphaely     | Alexander,Khoo    |   3100 |
| Den, Raphaely     | Shelli,Baida      |   2900 |
| Den, Raphaely     | Sigal,Tobias      |   2800 |
| Den, Raphaely     | Guy,Himuro        |   2600 |
| Den, Raphaely     | Karen,Colmenares  |   2500 |
| Lex, De Haan      | Alexander,Hunold  |   9000 |
| Matthew, Weiss    | Julia,Nayer       |   3200 |
| Matthew, Weiss    | Irene,Mikkilineni |   2700 |
| Matthew, Weiss    | James,Landry      |   2400 |
| Matthew, Weiss    | Steven,Markle     |   2200 |
| Nancy, Greenberg  | Daniel,Faviet     |   9000 |
| Nancy, Greenberg  | John,Chen         |   8200 |
| Nancy, Greenberg  | Ismael,Sciarra    |   7700 |
| Nancy, Greenberg  | Jose Manuel,Urman |   7800 |
| Nancy, Greenberg  | Luis,Popp         |   6900 |
| Neena, Kochhar    | Nancy,Greenberg   |  12000 |
| Steven, King      | Neena,Kochhar     |  17000 |
| Steven, King      | Lex,De Haan       |  17000 |
| Steven, King      | Den,Raphaely      |  11000 |
| Steven, King      | Matthew,Weiss     |   8000 |
| Steven, King      | Adam,Fripp        |   8200 |
| Steven, King      | Payam,Kaufling    |   7900 |
| Steven, King      | Shanta,Vollman    |   6500 |
| Steven, King      | Kevin,Mourgos     |   5800 |
+-------------------+-------------------+--------+
30 rows in set (0.00 sec)
```

6. Create a view for the above query



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

```
mysql> SELECT manager, COUNT(employee) as count  from EMPLOYEE_MANAGER GROUP BY manager ORDER BY count DESC ;
+-------------------+-------+
| manager           | count |
+-------------------+-------+
| Neena,Kochhar     |     1 |
| Lex,De Haan       |     1 |
| Alexander,Hunold  |     1 |
| Bruce,Ernst       |     1 |
| David,Austin      |     1 |
| Valli,Pataballa   |     1 |
| Diana,Lorentz     |     1 |
| Nancy,Greenberg   |     1 |
| Daniel,Faviet     |     1 |
| John,Chen         |     1 |
| Ismael,Sciarra    |     1 |
| Jose Manuel,Urman |     1 |
| Luis,Popp         |     1 |
| Den,Raphaely      |     1 |
| Alexander,Khoo    |     1 |
| Shelli,Baida      |     1 |
| Sigal,Tobias      |     1 |
| Guy,Himuro        |     1 |
| Karen,Colmenares  |     1 |
| Matthew,Weiss     |     1 |
| Adam,Fripp        |     1 |
| Payam,Kaufling    |     1 |
| Shanta,Vollman    |     1 |
| Kevin,Mourgos     |     1 |
| Julia,Nayer       |     1 |
| Irene,Mikkilineni |     1 |
| James,Landry      |     1 |
| Steven,Markle     |     1 |
| Laura,Bissot      |     1 |
| Mozhe,Atkinson    |     1 |
+-------------------+-------+
30 rows in set (0.00 sec)
```

8. Find the count of employees in each department

```
mysql> select department_id, COUNT(employee_id) as employee_count from employees group by department_id;
+---------------+----------------+
| department_id | employee_count |
+---------------+----------------+
|            20 |              2 |
|            30 |              3 |
|            40 |              3 |
|            50 |              7 |
|            60 |              4 |
|            70 |              1 |
|            80 |              2 |
|            90 |              1 |
|           100 |              1 |
|           110 |              1 |
|           130 |              1 |
|           140 |              1 |
|           150 |              1 |
|           160 |              1 |
|           170 |              2 |
+---------------+----------------+
15 rows in set (0.00 sec)

mysql>
```

9. Get the count of employees hired year wise

```
mysql> SELECT YEAR(hire_date),COUNT(Employee_id) from employees GROUP BY hire_date;
+-----------------+-------------------+
| YEAR(hire_date) | COUNT(Employee_id) |
+-----------------+-------------------+
|            1987 |                 1 |
|            1989 |                 1 |
|            1993 |                 1 |
|            1990 |                 1 |
|            1991 |                 1 |
|            1997 |                 1 |
|            1998 |                 1 |
|            1999 |                 1 |
|            1994 |                 1 |
|            1994 |                 1 |
|            1997 |                 1 |
|            1997 |                 1 |
|            1998 |                 1 |
|            1999 |                 1 |
|            1994 |                 1 |
|            1995 |                 1 |
|            1997 |                 1 |
|            1997 |                 2 |
|            1998 |                 1 |
|            1999 |                 1 |
|            1996 |                 1 |
|            1997 |                 1 |
|            1995 |                 1 |
|            1997 |                 2 |
|            1999 |                 1 |
|            1997 |                 1 |
|            1998 |                 1 |
|            1999 |                 1 |
|            2000 |                 1 |
+-----------------+-------------------+
29 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)

Command Prompt - mysql -u root -p

```
1 row in set (0.00 sec)

Query OK, 0 rows affected (0.01 sec)

mysql> DELIMITER //
mysql> CREATE PROCEDURE EMPLOYEE_COUNT( input_year INT)
    -> BEGIN
    -> SELECT COUNT(*) FROM employees where YEAR(hire_date) = input_year;
    -> END //
Query OK, 0 rows affected (0.01 sec)

mysql> DELIMITER ;
mysql> CALL EMPLOYEE_COUNT(1997);
+----------+
| COUNT(*) |
+----------+
|       10 |
+----------+
1 row in set (0.00 sec)

Query OK, 0 rows affected (0.01 sec)

mysql>
```

11.Select the employees whose first_name contains “an”

```
mysql> SELECT *FROM employees WHERE first_name LIKE '%an%';
+-------------+------------+-----------+----------+--------------+------------+------------+--------+----------------+------------+---------------+
| Employee_id | first_name | last_name | email    | phone_number | hire_date  | job_id     | salary | commission_pct | manager_id | department_id |
+-------------+------------+-----------+----------+--------------+------------+------------+--------+----------------+------------+---------------+
|         103 | Alexander  | Hunold    | AHUNOLD  | 590.423.4567 | 1990-09-30 | IT_PROG    |   9000 |           NULL |        102 |            60 |
|         107 | Diana      | Lorentz   | DLORENTZ | 590.423.5567 | 1999-02-09 | IT_PROG    |   4200 |           NULL |        103 |            40 |
|         108 | Nancy      | Greenberg | NGREENBE | 515.124.4569 | 1994-08-17 | FI_MGR     |  12000 |           NULL |        101 |           100 |
|         109 | Daniel     | Faviet    | DFAVIET  | 515.124.4169 | 1994-08-12 | FI_ACCOUNT |   9000 |           NULL |        108 |           170 |
|         112 | Jose Manuel | Urman    | JMURMAN  | 515.124.4469 | 1998-06-03 | FI_ACCOUNT |   7800 |           NULL |        108 |           150 |
|         115 | Alexander  | Khoo      | AKHOO    | 515.127.4562 | 1995-05-12 | PU_CLERK   |   3100 |           NULL |        114 |            80 |
|         123 | Shanta     | Vollman   | SVOLLMAN | 650.123.4234 | 1997-10-12 | ST_MAN     |   6500 |           NULL |        100 |            50 |
+-------------+------------+-----------+----------+--------------+------------+------------+--------+----------------+------------+---------------+
7 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 MONTH(hire_date) = 8 AND YEAR(hire_date)=1994;
+-------------+------------+-----------+----------+--------------+------------+------------+--------+----------------+------------+---------------+
| Employee_id | first_name | last_name | email    | phone_number | hire_date  | job_id     | salary | commission_pct | manager_id | department_id |
+-------------+------------+-----------+----------+--------------+------------+------------+--------+----------------+------------+---------------+
|         108 | Nancy      | Greenberg | NGREENBE | 515.124.4569 | 1994-08-17 | FI_MGR     |  12000 |           NULL |        101 |           100 |
|         109 | Daniel     | Faviet    | DFAVIET  | 515.124.4169 | 1994-08-12 | FI_ACCOUNT |   9000 |           NULL |        108 |           170 |
+-------------+------------+-----------+----------+--------------+------------+------------+--------+----------------+------------+---------------+
2 rows in set (0.01 sec)

mysql>
```

14. Find the maximum salary from each department.

```
mysql> SELECT department_id , MAX(salary) from employees group by department_id;
+---------------+-------------+
| department_id | MAX(salary) |
+---------------+-------------+
|            20 |       24000 |
|            30 |       17000 |
|            40 |        7900 |
|            50 |        8200 |
|            60 |        9000 |
|            70 |        2900 |
|            80 |        5800 |
|            90 |        2400 |
|           100 |       12000 |
|           110 |        2800 |
|           130 |        2500 |
|           140 |        6900 |
|           150 |        7800 |
|           160 |        7700 |
|           170 |        9000 |
+---------------+-------------+
15 rows in set (0.00 sec)
```

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

```
mysql> SELECT employee , MAX(salary) from employee_manager GROUP BY employee ORDER BY MAX(salary) asc limit 5;
+------------------+-------------+
| employee         | MAX(salary) |
+------------------+-------------+
| Den, Raphaely    |        3100 |
| Matthew, Weiss   |        3200 |
| Adam, Fripp      |        3300 |
| Alexander, Hunold |        6000 |
| Lex, De Haan     |        9000 |
+------------------+-------------+
5 rows in set (0.00 sec)
```

16. Find the employees hired in the 80s

```
mysql> SELECT* FROM  employees WHERE YEAR(hire_date) BETWEEN 1980 AND 1989 ;
+-------------+------------+-----------+----------+--------------+------------+---------+--------+----------------+------------+--------------+
| Employee_id | first_name | last_name | email    | phone_number | hire_date  | job_id  | salary | commission_pct | manager_id | department_id |
+-------------+------------+-----------+----------+--------------+------------+---------+--------+----------------+------------+--------------+
|         100 | Steven     | King      | SKING    | 515.123.4567 | 1987-06-17 | AD_PRES |  24000 |           NULL |       NULL |            20 |
|         101 | Neena      | Kochhar   | NKOCHHAR | 515.123.4568 | 1989-11-21 | AD_VP   |  17000 |           NULL |        100 |            20 |
+-------------+------------+-----------+----------+--------------+------------+---------+--------+----------------+------------+--------------+
2 rows in set (0.00 sec)

mysql>
```

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

```
mysql> SELECT* FROM  employees WHERE DAY(hire_date)>15  ;
+-------------+------------+-----------+----------+--------------+------------+---------+--------+----------------+------------+---------------+
| Employee_id | first_name | last_name | email    | phone_number | hire_date  | job_id  | salary | commission_pct | manager_id | department_id |
+-------------+------------+-----------+----------+--------------+------------+---------+--------+----------------+------------+---------------+
|         100 | Steven     | King      | SKING    | 515.123.4567 | 1987-06-17 | AD_PRES |  24000 |           NULL |       NULL |            20 |
|         101 | Neena      | Kochhar   | NKOCHHAR | 515.123.4568 | 1989-11-21 | AD_VP   |  17000 |           NULL |        100 |            20 |
|         103 | Alexander  | Hunold    | AHUNOLD  | 590.423.4567 | 1990-09-30 | IT_PROG |   9000 |           NULL |        102 |            60 |
|         104 | Bruce      | Ernst     | BERNST   | 590.423.4568 | 1991-05-21 | IT_PROG |   6000 |           NULL |        103 |            60 |
|         105 | David      | Austin    | DAUSTIN  | 590.423.4569 | 1997-06-25 | IT_PROG |   4800 |           NULL |        103 |            60 |
|         108 | Nancy      | Greenberg | NGREENBE | 515.124.4569 | 1994-08-17 | FI_MGR  |  12000 |           NULL |        101 |           100 |
|         120 | Matthew    | Weiss     | MWEISS   | 650.123.1234 | 1996-07-18 | ST_MAN  |   8000 |           NULL |        100 |            50 |
+-------------+------------+-----------+----------+--------------+------------+---------+--------+----------------+------------+---------------+
7 rows in set (0.00 sec)

mysql>
```