

MYSQL TASK 2

SHIBIN P K

Creating Database

```
mysql> CREATE DATABASE entri_assignment;
Query OK, 1 row affected (0.09 sec)

mysql> show databases;
+-----+
| Database |
+-----+
| classicmodels |
| entri |
| entri_assignment |
| entry |
| information_schema |
| mysql |
| performance_schema |
| salesdb |
| sample |
| sys |
+-----+
10 rows in set (0.00 sec)

mysql> use entri_assignment;
Database changed
```

Creating Tables

```
mysql> use entri_assignment;
Database changed
mysql> CREATE TABLE departments (
  -> Department_id INT PRIMARY KEY,
  -> Department_name VARCHAR(250),
  -> Location_id INT
  -> );
Query OK, 0 rows affected (0.84 sec)

mysql> show tables;
+-----+
| Tables_in_entri_assignment |
+-----+
| departments |
+-----+
1 row in set (0.00 sec)

mysql>
```

```
mysql> CREATE TABLE employees (
  -> Employee_id INT PRIMARY KEY,
  -> first_name VARCHAR(100),
  -> last_name VARCHAR(100),
  -> email VARCHAR(100),
  -> phone_number VARCHAR(100),
  -> hire_date DATE,
  -> job_id VARCHAR(100),
  -> salary INT,
  -> commission_pct INT,
  -> manager_id INT,
  -> department_id INT,
  -> FOREIGN KEY (department_id) REFERENCES departments(Department_id)
  -> );
Query OK, 0 rows affected (0.59 sec)

mysql> show tables;
+-----+
| Tables_in_entri_assignment |
+-----+
| departments                |
| employees                  |
+-----+
2 rows in set (0.00 sec)

mysql> _
```

Inserting Values

```
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 (1.18 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 (0.02 sec)

mysql> _
```

```
mysql>
mysql> INSERT INTO employees VALUES (100, 'Steven', 'King', 'SKING', '515.123.4567', '1987-06-17', 'AD_PRES', 24000, NULL, NULL, 20);
Query OK, 1 row affected (0.48 sec)

mysql> INSERT INTO employees VALUES (101, 'Neena', 'Kochhar', 'NKOCHHAR', '515.123.4568', '1989-11-21', 'AD_VP', 17000, NULL, 100, 20);
Query OK, 1 row affected (0.09 sec)

mysql> INSERT INTO employees VALUES (102, 'Lex', 'De Haan', 'LDEHAAN', '515.123.4569', '1993-09-12', 'AD_VP', 17000, NULL, 100, 30);
Query OK, 1 row affected (0.05 sec)

mysql> INSERT INTO employees VALUES (103, 'Alexander', 'Hunold', 'AHUNOLD', '590.423.4567', '1990-09-30', 'IT_PROG', 9000, NULL, 102, 60);
Query OK, 1 row affected (0.08 sec)

mysql> INSERT INTO employees VALUES (104, 'Bruce', 'Ernst', 'BERNST', '590.423.4568', '1991-05-21', 'IT_PROG', 6000, NULL, 103, 60);
Query OK, 1 row affected (0.05 sec)

mysql> INSERT INTO employees VALUES (105, 'David', 'Austin', 'DAUSTIN', '590.423.4569', '1997-06-25', 'IT_PROG', 4800, NULL, 103, 60);
Query OK, 1 row affected (0.09 sec)

mysql> INSERT INTO employees VALUES (106, 'Valli', 'Pataballa', 'VPATABAL', '590.423.4560', '1998-02-05', 'IT_PROG', 4800, NULL, 103, 40);
Query OK, 1 row affected (0.07 sec)

mysql> INSERT INTO employees VALUES (107, 'Diana', 'Lorentz', 'DLORENTZ', '590.423.5567', '1999-02-09', 'IT_PROG', 4200, NULL, 103, 40);
Query OK, 1 row affected (0.06 sec)

mysql> INSERT INTO employees VALUES (108, 'Nancy', 'Greenberg', 'NGREENBE', '515.124.4569', '1994-08-17', 'FI_MGR', 12000, NULL, 101, 100);
Query OK, 1 row affected (0.06 sec)

mysql> INSERT INTO employees VALUES (109, 'Daniel', 'Faviet', 'DFAVIET', '515.124.4169', '1994-08-12', 'FI_ACCOUNT', 9000, NULL, 108, 170);
Query OK, 1 row affected (0.05 sec)

mysql> INSERT INTO employees VALUES (110, 'John', 'Chen', 'JCHEN', '515.124.4269', '1997-04-09', 'FI_ACCOUNT', 8200, NULL, 108, 170);
Query OK, 1 row affected (0.06 sec)

mysql> INSERT INTO employees VALUES (111, 'Ismael', 'Sciarra', 'ISCIARRA', '515.124.4369', '1997-02-01', 'FI_ACCOUNT', 7700, NULL, 108, 160);
Query OK, 1 row affected (0.07 sec)
```

```
mysql> INSERT INTO employees VALUES (112, 'Jose Manuel', 'Urman', 'JMURMAN', '515.124.4469', '1998-06-03', 'FI_ACCOUNT', 7800, NULL, 108, 150);
Query OK, 1 row affected (0.10 sec)

mysql> INSERT INTO employees VALUES (113, 'Luis', 'Popp', 'LPOPP', '515.124.4567', '1999-12-07', 'FI_ACCOUNT', 6900, NULL, 108, 140);
Query OK, 1 row affected (0.15 sec)

mysql> INSERT INTO employees VALUES (114, 'Den', 'Raphaely', 'DRAPHEAL', '515.127.4561', '1994-11-08', 'PU_MAN', 11000, NULL, 100, 30);
Query OK, 1 row affected (0.04 sec)

mysql> INSERT INTO employees VALUES (115, 'Alexander', 'Khoo', 'AKHOO', '515.127.4562', '1995-05-12', 'PU_CLERK', 3100, NULL, 114, 80);
Query OK, 1 row affected (0.10 sec)

mysql> INSERT INTO employees VALUES (116, 'Shelli', 'Baida', 'SBAIDA', '515.127.4563', '1997-12-13', 'PU_CLERK', 2900, NULL, 114, 70);
Query OK, 1 row affected (0.05 sec)

mysql> INSERT INTO employees VALUES (117, 'Sigal', 'Tobias', 'STOBIAS', '515.127.4564', '1997-09-10', 'PU_CLERK', 2800, NULL, 114, 30);
Query OK, 1 row affected (0.05 sec)

mysql> INSERT INTO employees VALUES (118, 'Guy', 'Himuro', 'GHIMURO', '515.127.4565', '1998-01-02', 'PU_CLERK', 2600, NULL, 114, 60);
Query OK, 1 row affected (0.09 sec)

mysql> INSERT INTO employees VALUES (119, 'Karen', 'Colmenares', 'KCOLMENEA', '515.127.4566', '1999-04-08', 'PU_CLERK', 2500, NULL, 114, 130);
Query OK, 1 row affected (0.04 sec)

mysql> INSERT INTO employees VALUES (120, 'Matthew', 'Weiss', 'MWEISS', '650.123.1234', '1996-07-18', 'ST_MAN', 8000, NULL, 100, 50);
Query OK, 1 row affected (0.07 sec)

mysql> INSERT INTO employees VALUES (121, 'Adam', 'Fripp', 'AFRIPP', '650.123.2234', '1997-08-09', 'ST_MAN', 8200, NULL, 100, 50);
Query OK, 1 row affected (0.05 sec)

mysql> INSERT INTO employees VALUES (122, 'Payam', 'Kaufling', 'PKAUFLIN', '650.123.3234', '1995-05-01', 'ST_MAN', 7900, NULL, 100, 40);
Query OK, 1 row affected (0.04 sec)

mysql> INSERT INTO employees VALUES (123, 'Shanta', 'Vollman', 'SVOLLMAN', '650.123.4234', '1997-10-12', 'ST_MAN', 6500, NULL, 100, 50);
Query OK, 1 row affected (0.05 sec)

mysql> INSERT INTO employees VALUES (124, 'Kevin', 'Mourgos', 'KMOURGOS', '650.123.5234', '1999-11-12', 'ST_MAN', 5800, NULL, 100, 80);
Query OK, 1 row affected (0.09 sec)

mysql> INSERT INTO employees VALUES (125, 'Julia', 'Nayer', 'JNAYER', '650.124.1214', '1997-07-02', 'ST_CLERK', 3200, NULL, 120, 50);
Query OK, 1 row affected (0.05 sec)
```

```
mysql> INSERT INTO employees VALUES (126, 'Irene', 'Mikkilineni', 'IMIKKILI', '650.124.1224', '1998-11-12', 'ST_CLERK', 2700, NULL, 120, 50);
Query OK, 1 row affected (0.05 sec)

mysql> INSERT INTO employees VALUES (127, 'James', 'Landry', 'JLANDRY', '650.124.1334', '1999-01-02', 'ST_CLERK', 2400, NULL, 120, 90);
Query OK, 1 row affected (0.06 sec)

mysql> INSERT INTO employees VALUES (128, 'Steven', 'Markle', 'SMARKLE', '650.124.1434', '2000-03-04', 'ST_CLERK', 2200, NULL, 120, 50);
Query OK, 1 row affected (0.09 sec)

mysql> INSERT INTO employees VALUES (129, 'Laura', 'Bissot', 'LBISSOT', '650.124.5234', '1997-09-10', 'ST_CLERK', 3300, NULL, 121, 50);
Query OK, 1 row affected (0.05 sec)

mysql> INSERT INTO employees VALUES (130, 'Mozhe', 'Atkinson', 'MATKINSO', '650.124.6234', '1997-10-12', 'ST_CLERK', 2800, NULL, 121, 110);
Query OK, 1 row affected (0.05 sec)
```

```
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	KCOLMENAR	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	IMIKKILIN	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)

mysql>
```

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

```
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 (0.08 sec)

mysql>
```

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

```
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 (0.07 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 (0.17 sec)  
  
mysql>
```

3. Select employee with the second highest salary

```
mysql> SELECT * FROM employees WHERE salary = (SELECT MAX(salary) 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
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

```
2 rows in set (0.08 sec)
```

```
mysql>
```

```
mysql> SELECT employee_id, first_name, last_name, job_id, salary FROM employees
      -> WHERE salary != (SELECT MAX(salary) FROM employees) ORDER BY salary DESC LIMIT 1;
+-----+-----+-----+-----+-----+
| employee_id | first_name | last_name | job_id | salary |
+-----+-----+-----+-----+-----+
|          101 | Neena     | Kochhar   | AD_VP  | 17000  |
+-----+-----+-----+-----+-----+
1 row in set (0.00 sec)

mysql> _
```

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

```
mysql> SELECT employee_id, first_name, last_name, manager_id, salary FROM employees;
+-----+-----+-----+-----+-----+
| employee_id | first_name | last_name | manager_id | salary |
+-----+-----+-----+-----+-----+
|          100 | Steven    | King      | NULL       | 24000  |
|          101 | Neena     | Kochhar   |          100 | 17000  |
|          102 | Lex       | De Haan   |          100 | 17000  |
|          103 | Alexander | Hunold    |          102 | 9000   |
|          104 | Bruce     | Ernst     |          103 | 6000   |
|          105 | David     | Austin    |          103 | 4800   |
|          106 | Valli     | Pataballa |          103 | 4800   |
|          107 | Diana     | Lorentz   |          103 | 4200   |
|          108 | Nancy     | Greenberg |          101 | 12000  |
|          109 | Daniel    | Favier    |          108 | 9000   |
|          110 | John      | Chen      |          108 | 8200   |
|          111 | Ismael    | Sciarra   |          108 | 7700   |
|          112 | Jose Manuel | Urman     |          108 | 7800   |
|          113 | Luis      | Popp      |          108 | 6900   |
|          114 | Den       | Raphaely  |          100 | 11000  |
|          115 | Alexander | Khoo      |          114 | 3100   |
|          116 | Shellie   | Baida     |          114 | 2900   |
|          117 | Sigal     | Tobias    |          114 | 2800   |
|          118 | Guy       | Himuro    |          114 | 2600   |
|          119 | Karen     | Colmenares |          114 | 2500   |
|          120 | Matthew   | Weiss     |          100 | 8000   |
|          121 | Adam      | Fripp     |          100 | 8200   |
|          122 | Payam     | Kaufling  |          100 | 7900   |
|          123 | Shanta    | Vollman   |          100 | 6500   |
|          124 | Kevin     | Mourgos   |          100 | 5800   |
|          125 | Julia     | Nayer     |          120 | 3200   |
|          126 | Irene     | Mikkilineni |          120 | 2700   |
|          127 | James     | Landry    |          120 | 2400   |
|          128 | Steven    | Markle    |          120 | 2200   |
|          129 | Laura     | Bissot    |          121 | 3300   |
|          130 | Mozhe     | Atkinson  |          121 | 2800   |
+-----+-----+-----+-----+-----+
31 rows in set (0.00 sec)

mysql> _
```

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

```
mysql>
mysql> SELECT
  -> CONCAT(emp.first_name, ' ', emp.last_name) employee,
  -> emp.salary emp_sal,
  -> CONCAT(mgr.first_name, ' ', mgr.last_name) manager,
  -> mgr.salary mgr_sal
  -> FROM employees emp
  -> JOIN employees mgr ON
  -> emp.manager_id = mgr.employee_id;
```

employee	emp_sal	manager	mgr_sal
Neena Kochhar	17000	Steven King	24000
Lex De Haan	17000	Steven King	24000
Alexander Hunold	9000	Lex De Haan	17000
Bruce Ernst	6000	Alexander Hunold	9000
David Austin	4800	Alexander Hunold	9000
Valli Pataballa	4800	Alexander Hunold	9000
Diana Lorentz	4200	Alexander Hunold	9000
Nancy Greenberg	12000	Neena Kochhar	17000
Daniel Faviet	9000	Nancy Greenberg	12000
John Chen	8200	Nancy Greenberg	12000
Ismael Sciarra	7700	Nancy Greenberg	12000
Jose Manuel Urman	7800	Nancy Greenberg	12000
Luis Popp	6900	Nancy Greenberg	12000
Den Raphaely	11000	Steven King	24000
Alexander Khoo	3100	Den Raphaely	11000
Shelli Baida	2900	Den Raphaely	11000
Sigal Tobias	2800	Den Raphaely	11000
Guy Himuro	2600	Den Raphaely	11000
Karen Colmenares	2500	Den Raphaely	11000
Matthew Weiss	8000	Steven King	24000
Adam Fripp	8200	Steven King	24000
Payam Kaufling	7900	Steven King	24000
Shanta Vollman	6500	Steven King	24000
Kevin Mourgous	5800	Steven King	24000
Julia Nayer	3200	Matthew Weiss	8000
Irene Mikkilineni	2700	Matthew Weiss	8000
James Landry	2400	Matthew Weiss	8000
Steven Markle	2200	Matthew Weiss	8000
Laura Bissot	3300	Adam Fripp	8200
Mozhe Atkinson	2800	Adam Fripp	8200

6. Create a view for the above query

```
mysql> CREATE VIEW EMPLOYEE_MANAGER AS
-> SELECT
->   CONCAT(emp.first_name, ' ', emp.last_name) employee,
->   emp.salary emp_sal,
->   CONCAT(mgr.first_name, ' ', mgr.last_name) manager,
->   mgr.salary mgr_sal
-> FROM employees emp
-> JOIN employees mgr ON
->   emp.manager_id = mgr.employee_id;
Query OK, 0 rows affected (0.86 sec)
```

```
mysql> SELECT * FROM EMPLOYEE_MANAGER;
```

employee	emp_sal	manager	mgr_sal
Neena Kochhar	17000	Steven King	24000
Lex De Haan	17000	Steven King	24000
Alexander Hunold	9000	Lex De Haan	17000
Bruce Ernst	6000	Alexander Hunold	9000
David Austin	4800	Alexander Hunold	9000
Valli Pataballa	4800	Alexander Hunold	9000
Diana Lorentz	4200	Alexander Hunold	9000
Nancy Greenberg	12000	Neena Kochhar	17000
Daniel Faviet	9000	Nancy Greenberg	12000
John Chen	8200	Nancy Greenberg	12000
Ismael Sciarra	7700	Nancy Greenberg	12000
Jose Manuel Urman	7800	Nancy Greenberg	12000
Luis Popp	6900	Nancy Greenberg	12000
Den Raphaely	11000	Steven King	24000
Alexander Khoo	3100	Den Raphaely	11000
Shelli Baida	2900	Den Raphaely	11000
Sigal Tobias	2800	Den Raphaely	11000
Guy Himuro	2600	Den Raphaely	11000
Karen Colmenares	2500	Den Raphaely	11000
Matthew Weiss	8000	Steven King	24000
Adam Fripp	8200	Steven King	24000
Payam Kaufling	7900	Steven King	24000
Shanta Vollman	6500	Steven King	24000
Kevin Mourgos	5800	Steven King	24000
Julia Nayer	3200	Matthew Weiss	8000
Irene Mikkilineni	2700	Matthew Weiss	8000
James Landry	2400	Matthew Weiss	8000
Steven Markle	2200	Matthew Weiss	8000

```
mysql> show full tables;
```

Tables_in_entri_assignment	Table_type
departments	BASE TABLE
employee_manager	VIEW
employees	BASE TABLE

```
3 rows in set (0.07 sec)

mysql> _
```

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
Steven King	8
Nancy Greenberg	5
Den Raphaely	5
Alexander Hunold	4
Matthew Weiss	4
Adam Fripp	2
Lex De Haan	1
Neena Kochhar	1

```
8 rows in set (0.09 sec)
```


8.Find the count of employees in each department

```
mysql> SELECT Department_name, COUNT(employee_id) as "Emp_Count"  
-> FROM Departments d  
-> LEFT JOIN employees e ON d.Department_id = e.department_id  
-> GROUP BY d.Department_id, Department_name  
-> ORDER BY Emp_Count DESC;
```

Department_name	Emp_Count
Shipping	7
IT	4
Purchasing	3
Human Resources	3
Marketing	2
Sales	2
Payroll	2
Public Relations	1
Executive	1
Finance	1
Accounting	1
Corporate Tax	1
Control And Credit	1
Shareholder Services	1
Benefits	1
Treasury	0

16 rows in set (0.40 sec)

```
mysql> _
```

9.Get the count of employees hired year wise

```
mysql> SELECT YEAR(hire_date) AS "Year", COUNT(*) AS "Hired"  
-> FROM employees  
-> GROUP BY Year  
-> ORDER BY Year;
```

Year	Hired
1987	1
1989	1
1990	1
1991	1
1993	1
1994	3
1995	2
1996	1
1997	10
1998	4
1999	5
2000	1

12 rows in set (0.19 sec)

```
mysql>
```

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

```
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 (0.17 sec)

mysql> DELIMITER ;
mysql> CALL EMPLOYEE_COUNT(1997);
+-----+
| COUNT(*) |
+-----+
|      10 |
+-----+
1 row in set (0.29 sec)

Query OK, 0 rows affected (0.31 sec)
```

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 | Faviat | 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 (0.06 sec)
```

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

```
mysql> SELECT first_name, CONCAT
-> ('(',SUBSTRING(phone_number,1,3),')-(',SUBSTRING(phone_number,5,3),')-(',SUBSTRING(phone_number,9,4),')') AS 'Phone Number'
-> FROM employees;
```

first_name	Phone Number
Steven	(515)-(123)-(4567)
Neena	(515)-(123)-(4568)
Lex	(515)-(123)-(4569)
Alexander	(590)-(423)-(4567)
Bruce	(590)-(423)-(4568)
David	(590)-(423)-(4569)
Valli	(590)-(423)-(4560)
Diana	(590)-(423)-(5567)
Nancy	(515)-(124)-(4569)
Daniel	(515)-(124)-(4169)
John	(515)-(124)-(4269)
Ismael	(515)-(124)-(4369)
Jose Manuel	(515)-(124)-(4469)
Luis	(515)-(124)-(4567)
Den	(515)-(127)-(4561)
Alexander	(515)-(127)-(4562)
Shelli	(515)-(127)-(4563)
Sigal	(515)-(127)-(4564)
Guy	(515)-(127)-(4565)
Karen	(515)-(127)-(4566)
Matthew	(650)-(123)-(1234)
Adam	(650)-(123)-(2234)
Payam	(650)-(123)-(3234)
Shanta	(650)-(123)-(4234)
Kevin	(650)-(123)-(5234)
Julia	(650)-(124)-(1214)
Irene	(650)-(124)-(1224)
James	(650)-(124)-(1334)
Steven	(650)-(124)-(1434)
Laura	(650)-(124)-(5234)
Mozhe	(650)-(124)-(6234)

```
31 rows in set (0.00 sec)
```

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 (0.04 sec)
```

```
mysql>
```

14. Find the maximum salary from each department.

```
mysql> SELECT Department_name,MAX(salary) AS 'Salary'
-> FROM Departments d
-> INNER JOIN employees e ON d.Department_id = e.department_id
-> GROUP BY Department_name;
```

Department_name	Salary
Marketing	24000
Purchasing	17000
IT	9000
Human Resources	7900
Finance	12000
Payroll	9000
Benefits	7700
Shareholder Services	7800
Control And Credit	6900
Sales	5800
Public Relations	2900
Corporate Tax	2500
Shipping	8200
Executive	2400
Accounting	2800

```
15 rows in set (0.04 sec)
```

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

```
mysql> SELECT * FROM employees ORDER BY salary limit 5;
```

Employee_id	first_name	last_name	email	phone_number	hire_date	job_id	salary	commission_pct	manager_id	department_id
128	Steven	Markle	SMARKLE	650.124.1434	2000-03-04	ST_CLERK	2200	NULL	120	50
127	James	Landry	JLANDRY	650.124.1334	1999-01-02	ST_CLERK	2400	NULL	120	90
119	Karen	Colmenares	KCOLMENA	515.127.4566	1999-04-08	PU_CLERK	2500	NULL	114	130
118	Guy	Himuro	GHIMURO	515.127.4565	1998-01-02	PU_CLERK	2600	NULL	114	60
126	Irene	Mikkilineni	IMIKKILI	650.124.1224	1998-11-12	ST_CLERK	2700	NULL	120	50

```
5 rows in set (0.04 sec)

mysql>
```

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 (0.03 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 (0.04 sec)

mysql> .
```