Assignment 1

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

```
Database changed
mysql> select first_name,last_name,job_id,salary from employees where first_name like 'S%';
+------------+-----------+----------+--------+
| first_name | last_name | job_id   | salary |
+------------+-----------+----------+--------+
| Shelli     | Baida     | PU_CLERK |   2900 |
| Sigal      | Tobias    | PU_CLERK |   2800 |
| Shanta     | Vollman   | ST_MAN   |   6500 |
| Steven     | Markle    | ST_CLERK |   2200 |
+------------+-----------+----------+--------+
4 rows in set (0.00 sec)
```

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

```
mysql> select first_name,salary from employees where salary = (select MAX(salary) from employees);
+------------+--------+
| first_name | salary |
+------------+--------+
| Neena      |  17000 |
| Lex        |  17000 |
+------------+--------+
2 rows in set (0.00 sec)
```

3. Select employee with the second highest salary

```
mysql> SELECT first_name,salary
    -> from employees
    -> where salary=(SELECT MAX(salary)
    ->                   from employees
    ->               where salary <> (select MAX(salary)
    ->                                from employees));
+------------+--------+
| first_name | salary |
+------------+--------+
| Nancy      |  12000 |
+------------+--------+
1 row in set (0.00 sec)
```

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

```
mysql> SELECT
    ->     e.first_name AS employee_name,
    ->     e.salary AS employee_salary,
    ->     m.first_name AS manager_name,
    ->     m.salary AS manager_salary
    -> FROM
    ->     employees e
    -> LEFT JOIN
    ->     employees m ON e.manager_id = m.employee_id;
+---------------+-----------------+--------------+----------------+
| employee_name | employee_salary | manager_name | manager_salary |
+---------------+-----------------+--------------+----------------+
| Neena         |           17000 | NULL         |           NULL |
| Lex           |           17000 | NULL         |           NULL |
| Bruce         |            6000 | NULL         |           NULL |
| David         |            4800 | NULL         |           NULL |
| Valli         |            4800 | NULL         |           NULL |
| Diana         |            4200 | NULL         |           NULL |
| Nancy         |           12000 | Neena        |          17000 |
| Daniel        |            9000 | Nancy        |          12000 |
| John          |            8200 | Nancy        |          12000 |
| Ismael        |            7700 | Nancy        |          12000 |
| Jose Manuel   |            7800 | Nancy        |          12000 |
| Den           |           11000 | NULL         |           NULL |
| Alexander     |            3100 | Den          |          11000 |
| Shelli        |            2900 | Den          |          11000 |
| Sigal         |            2800 | Den          |          11000 |
| Guy           |            2600 | Den          |          11000 |
| Karen         |            2500 | Den          |          11000 |
| Matthew       |            8000 | NULL         |           NULL |
| Payam         |            7900 | NULL         |           NULL |
| Shanta        |            6500 | NULL         |           NULL |
| Kevin         |            5800 | NULL         |           NULL |
| Julia         |            3200 | Matthew      |           8000 |
| Irene         |            2700 | Matthew      |           8000 |
| James         |            2400 | Matthew      |           8000 |
| Steven        |            2200 | Matthew      |           8000 |
| Mozhe         |            2800 | 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.first_Name AS Employee,
    ->     e.salary AS Employee_Salary,
    ->
    ->  m.first_Name AS Manager,
    ->     m.salary AS Manager_Salary
    -> FROM
    ->     employees e
    -> INNER JOIN employees m ON
    ->     e.manager_id = m.employee_id
    -> ORDER BY
    ->     Manager;
+-------------+-----------------+---------+----------------+
| Employee    | Employee_Salary | Manager | Manager_Salary |
+-------------+-----------------+---------+----------------+
| Alexander   |            3100 | Den     |          11000 |
| Shelli      |            2900 | Den     |          11000 |
| Sigal       |            2800 | Den     |          11000 |
| Guy         |            2600 | Den     |          11000 |
| Karen       |            2500 | Den     |          11000 |
| Julia       |            3200 | Matthew |           8000 |
| Irene       |            2700 | Matthew |           8000 |
| James       |            2400 | Matthew |           8000 |
| Steven      |            2200 | Matthew |           8000 |
| Daniel      |            9000 | Nancy   |          12000 |
| John        |            8200 | Nancy   |          12000 |
| Ismael      |            7700 | Nancy   |          12000 |
| Jose Manuel |            7800 | Nancy   |          12000 |
| Nancy       |           12000 | Neena   |          17000 |
+-------------+-----------------+---------+----------------+
14 rows in set (0.00 sec)
```

6. Create a view for the above query

```
103 •  CREATE VIEW Employee_Manager_Salaries_View AS
104     SELECT
105         e.first_Name AS Employee,
106         e.salary AS Employee_Salary,
107
108         m.first_Name AS Manager,
109         m.salary AS Manager_Salary
110     FROM
111         employees e
112     INNER JOIN employees m ON
113         e.manager_id = m.employee_id
114     ORDER BY
115         Manager;
116 •   SHOW FULL TABLES;
```

Result Grid | Filter Rows: | Export: | Wrap Cell

Tables_in_entri_assignment	Table_type
departments	BASE TABLE
employee_manager_salaries_view	VIEW
employees	BASE TABLE

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

```
123 •  select Manager,count(Employee) count
124     from employee_manager_salaries_view
125     group by Manager
126     order by  count desc;
127
```

Result Grid | Filter Rows: | Export:

Manager	count
Den	5
Nancy	4
Matthew	4
Neena	1

8. Find the count of employees in each department

```
135 •   SELECT Department_id ,
136     count(first_name) AS Number_of_Employee
137     FROM employees
138     GROUP BY department_id
139     order by Number_of_Employee;
140
```

Result Grid | Filter Rows: | Export:

Department_id	Number_of_Employee
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

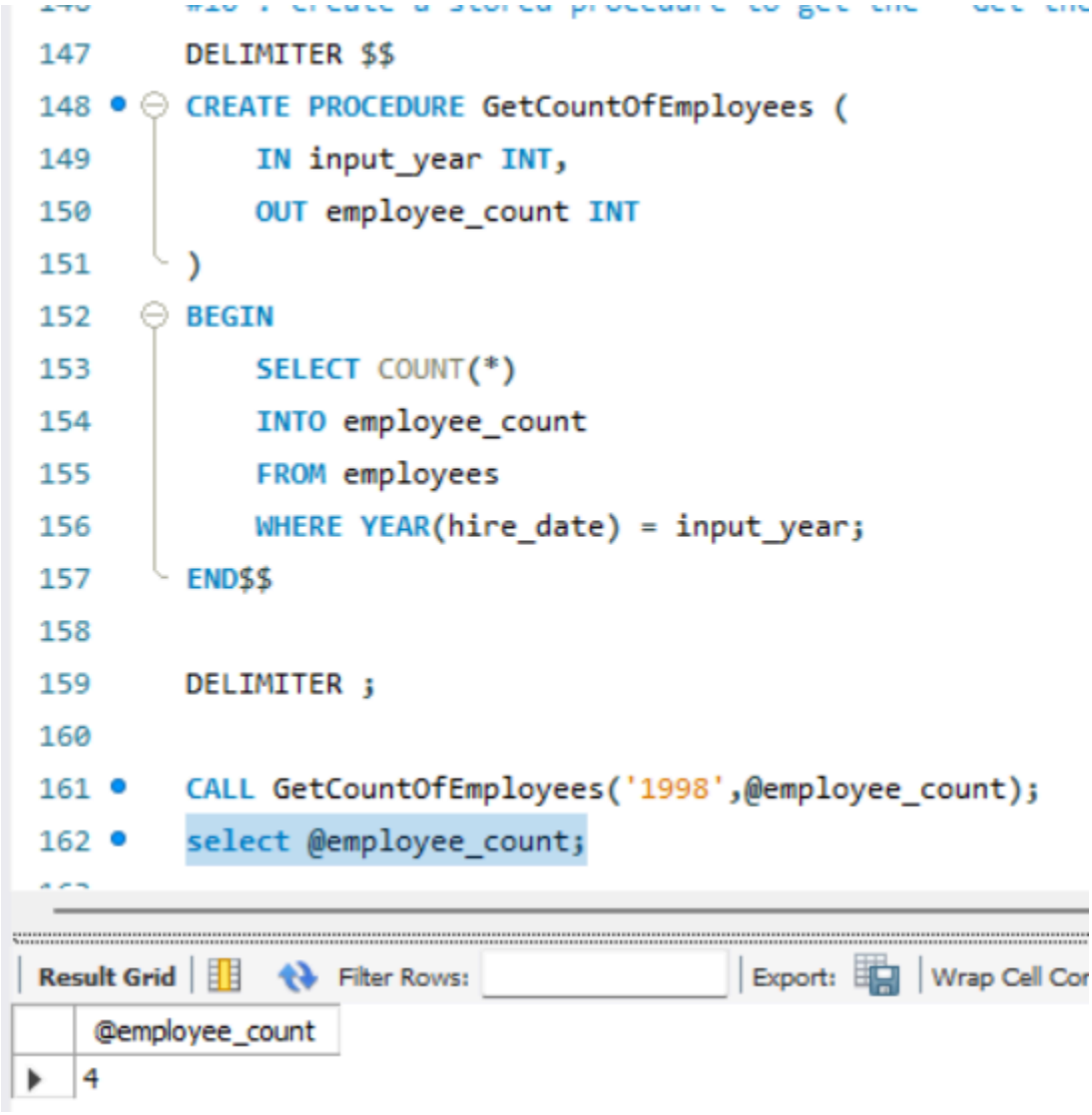
9. Get the count of employees hired year wise

```
138 •    select year(hire_date)as Hired_Year,
139              count(first_name) as Number_of_employees
140              from employees
141              group by Hired_year
142              order by Number_of_employees;
143
144
```

Result Grid | Filter Rows: | Export: | Wrap Cell

Hired_Year	Number_of_employees
1989	1
1993	1
1991	1
1996	1
2000	1
1995	2
1994	3
1998	4
1999	4
1997	8

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



```
147  DELIMITER $$
148  CREATE PROCEDURE GetCountOfEmployees (
149      IN input_year INT,
150      OUT employee_count INT
151  )
152  BEGIN
153      SELECT COUNT(*)
154      INTO employee_count
155      FROM employees
156      WHERE YEAR(hire_date) = input_year;
157  END$$
158
159  DELIMITER ;
160
161  CALL GetCountOfEmployees('1998',@employee_count);
162  select @employee_count;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Cor

@employee_count
4

11.Select the employees whose first_name contains “an”

```
mysql> SELECT first_name FROM employees WHERE first_name LIKE '%an%';
+--------------+
| first_name   |
+--------------+
| Diana        |
| Nancy        |
| Daniel       |
| Jose Manuel  |
| Alexander    |
| Shanta       |
+--------------+
6 rows in set (0.00 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 formatted_phone_number
    -> FROM
    ->     employees;
+-------------+------------------------+
| first_name  | formatted_phone_number |
+-------------+------------------------+
| Neena       | (515)-(123)-(4568)     |
| Lex         | (515)-(123)-(4569)     |
| 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)     |
| 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)     |
| 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)     |
| Mozhe       | (650)-(124)-(6234)     |
+-------------+------------------------+
26 rows in set (0.00 sec)
```

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

```
162 •   select first_name as Employees, hire_date as Aug_1994
163     from employees
164     where year(hire_date)='1994'
165     and month(hire_date)='08';
```

Result Grid | Filter Rows: | Export: | Wrap Cell Conte

Employees	Aug_1994
Nancy	1994-08-17
Daniel	1994-08-12

14. Find the maximum salary from each department.

```
168 •   select department_id,max(salary) as Max_Salary
169     from employees
170     group by department_id
171     order by Max_Salary desc;
```

Result Grid | Filter Rows: | Export: | Wrap Ce

department_id	Max_Salary
20	17000
30	17000
100	12000
170	9000
50	8000
40	7900
150	7800
160	7700
60	6000
80	5800
70	2900
110	2800
130	2500
90	2400

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

```
174 •   select first_name as Employees,
175     salary
176     from employees
177     order by salary asc
178     limit 5;
```

Result Grid | Filter Rows:

Employees	salary
Steven	2200
James	2400
Karen	2500
Guy	2600
Irene	2700

16. Find the employees hired in the 80s

```
181 •   select first_name as Employees, hire_date as `Employee 80's`
182     from employees
183     where year(hire_date) between'1980' and '1989';
184
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

Employees	Employee 80's
Neena	1989-11-21

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

```
186 •   select first_name as `Employees Joined after 15th of the month`,
187     hire_date as `Joined Date`
188     from employees
189     where day(hire_date) >'15';
190
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

Employees Joined after 15th of the month	Joined Date
Neena	1989-11-21
Bruce	1991-05-21
David	1997-06-25
Nancy	1994-08-17
Matthew	1996-07-18