

MySQL Task 2

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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 employee 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

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

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

```
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	24000.00	NULL	NULL	20

```
1 row in set (0.00 sec)
```

3. Select employee with the second highest salary

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

employee_id	first_name	last_name	email	phone_number	hire_date	job_id	salary	commission_pct	manager_id	department_id
127	James	Landry	JLANDRY	650.124.1334	1999-01-02	ST_CLERK	2400.00	NULL	120	90

```
1 row in set (0.00 sec)
```

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	24000.00
101	Neena	Kochhar	100	17000.00
102	Lex	De Haan	100	17000.00
103	Alexander	Hunold	102	9000.00
104	Bruce	Ernst	103	6000.00
105	David	Austin	103	4800.00
106	Valli	Pataballa	103	4800.00
107	Diana	Lorentz	103	4200.00
108	Nancy	Greenberg	101	12000.00
109	Daniel	Faviet	108	9000.00
110	John	Chen	108	8200.00
111	Ismael	Sciarra	108	7700.00
112	Jose Manuel	Urman	108	7800.00
113	Luis	Popp	108	6900.00
114	Den	Raphaely	100	11000.00
115	Alexander	Khoo	114	3100.00
116	Shelli	Baida	114	2900.00
117	Sigal	Tobias	114	2800.00
118	Guy	Himuro	114	2600.00
119	Karen	Colmenares	114	2500.00
120	Matthew	Weiss	100	8000.00
121	Adam	Fripp	100	8200.00
122	Payam	Kaufling	100	7900.00
123	Shanta	Vollman	100	6500.00
124	Kevin	Mourgos	100	5800.00
125	Julia	Nayer	120	3200.00
126	Irene	Mikkilineni	120	2700.00
127	James	Landry	120	2400.00

```
28 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 Employee_ID,
-> e.first_name AS Employee_FirstName,
-> e.last_name AS Employee_LastName,
-> e.salary AS Employee_Salary,
-> m.employee_id AS Manager_ID,
-> m.first_name AS Manager_FirstName,
-> m.last_name AS Manager_LastName,
-> m.salary AS Manager_Salary
-> FROM
-> employees e
-> LEFT JOIN
-> employees m ON e.manager_id = m.employee_id;
```

Employee_ID	Employee_FirstName	Employee_LastName	Employee_Salary	Manager_ID	Manager_FirstName	Manager_LastName	Manager_Salary
100	Steven	King	24000.00	NULL	NULL	NULL	NULL
101	Neena	Kochhar	17000.00	100	Steven	King	24000.00
102	Lex	De Haan	17000.00	100	Steven	King	24000.00
103	Alexander	Hunold	9000.00	102	Lex	De Haan	17000.00
104	Bruce	Ernst	6000.00	103	Alexander	Hunold	9000.00
105	David	Austin	4800.00	103	Alexander	Hunold	9000.00
106	Valli	Pataballa	4800.00	103	Alexander	Hunold	9000.00
107	Diana	Lorentz	4200.00	103	Alexander	Hunold	9000.00
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	108	Nancy	Greenberg	12000.00
113	Luis	Popp	6900.00	108	Nancy	Greenberg	12000.00
114	Den	Raphaely	11000.00	100	Steven	King	24000.00
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	100	Steven	King	24000.00
121	Adam	Fripp	8200.00	100	Steven	King	24000.00
122	Payam	Kaufling	7900.00	100	Steven	King	24000.00
123	Shanta	Vollman	6500.00	100	Steven	King	24000.00
124	Kevin	Mourgos	5800.00	100	Steven	King	24000.00
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

6. Create a view for the above query

```
mysql> ;CREATE VIEW EmployeeManagerSalaries AS
ERROR:
No query specified

-> SELECT
-> e.employee_id AS Employee_ID,
-> e.first_name AS Employee_FirstName,
-> e.last_name AS Employee_LastName,
-> e.salary AS Employee_Salary,
-> m.employee_id AS Manager_ID,
-> m.first_name AS Manager_FirstName,
-> m.last_name AS Manager_LastName,
-> m.salary AS Manager_Salary
-> FROM
-> employees e
-> LEFT JOIN
-> employees m ON e.manager_id = m.employee_id;
Query OK, 0 rows affected (0.05 sec)
```

```
mysql> SELECT * FROM EmployeeManagerSalaries;
```

Employee_ID	Employee_FirstName	Employee_LastName	Employee_Salary	Manager_ID	Manager_FirstName	Manager_LastName	Manager_Salary
100	Steven	King	24000.00	NULL	NULL	NULL	NULL
101	Neena	Kochhar	17000.00	100	Steven	King	24000.00
102	Lex	De Haan	17000.00	100	Steven	King	24000.00
103	Alexander	Hunold	9000.00	102	Lex	De Haan	17000.00
104	Bruce	Ernst	6000.00	103	Alexander	Hunold	9000.00
105	David	Austin	4800.00	103	Alexander	Hunold	9000.00
106	Valli	Pataballa	4800.00	103	Alexander	Hunold	9000.00
107	Diana	Lorentz	4200.00	103	Alexander	Hunold	9000.00
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	108	Nancy	Greenberg	12000.00
113	Luis	Popp	6900.00	108	Nancy	Greenberg	12000.00
114	Den	Raphaely	11000.00	100	Steven	King	24000.00
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	100	Steven	King	24000.00
121	Adam	Fripp	8200.00	100	Steven	King	24000.00
122	Payam	Kaufling	7900.00	100	Steven	King	24000.00
123	Shanta	Vollman	6500.00	100	Steven	King	24000.00
124	Kevin	Mourgos	5800.00	100	Steven	King	24000.00
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

28 rows in set (0.00 sec)

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

```
mysql> SELECT
->     Manager_ID,
->     Manager_FirstName,
->     Manager_LastName,
->     COUNT(Employee_ID) AS Employee_Count
-> FROM
->     EmployeeManagerSalaries
-> GROUP BY
->     Manager_ID, Manager_FirstName, Manager_LastName
-> ORDER BY
->     Employee_Count DESC;
```

Manager_ID	Manager_FirstName	Manager_LastName	Employee_Count
100	Steven	King	8
108	Nancy	Greenberg	5
114	Den	Raphaely	5
103	Alexander	Hunold	4
120	Matthew	Weiss	3
NULL	NULL	NULL	1
102	Lex	De Haan	1
101	Neena	Kochhar	1

8 rows in set (0.04 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
-> ORDER BY
->     department_id;
```

department_id	employee_count
20	2
30	3
40	3
50	5
60	4
70	1
80	2
90	1
100	1
130	1
140	1
150	1
160	1
170	2

14 rows in set (0.00 sec)

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	1
1998	1
1999	1
1996	1
1997	1
1995	1
1997	1
1999	1
1997	1
1998	1
1999	1

28 rows in set (0.04 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 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	9000.00	NULL	102	60
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	108	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

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

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

Employee_FirstName	Formatted_PhoneNumber
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)

28 rows in set (0.04 sec)

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	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	12000.00	NULL	101	100
109	Daniel	Faviet	DFAVIET	515.124.4169	1994-08-12	FI_ACCOUNT	9000.00	NULL	108	170

2 rows in set (0.00 sec)

14. Find the maximum salary from each department.

```
mysql> SELECT department_id, MAX(salary) AS max_salary
-> FROM employees
-> GROUP BY department_id;
```

department_id	max_salary
20	24000.00
30	17000.00
40	7900.00
50	8200.00
60	9000.00
70	2900.00
80	5800.00
90	2400.00
100	12000.00
130	2500.00
140	6900.00
150	7800.00
160	7700.00
170	9000.00

14 rows in set (0.00 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
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	GHIIMURO	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
117	Sigal	Tobias	STOBIAS	515.127.4564	1997-09-10	PU_CLERK	2800.00	NULL	114	30

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	24000.00	NULL	NULL	20
101	Neena	Kochhar	NKOCHHAR	515.123.4568	1989-11-21	AD_VP	17000.00	NULL	100	20

2 rows 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	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	24000.00	NULL	NULL	20
101	Neena	Kochhar	NKOCHHAR	515.123.4568	1989-11-21	AD_VP	17000.00	NULL	100	20
103	Alexander	Hunold	AHUNOLD	590.423.4567	1990-09-30	IT_PROG	9000.00	NULL	102	60
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

7 rows in set (0.00 sec)