

MYSQL TASK-2

ANUKRISHNAN T

Creating Database

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

```
mysql> show databases;
```

Database
anu
entri
entri_assignment
entry
information_schema
mysql
performance_schema
sample
sys

```
+-----+  
9 rows in set (0.05 sec)
```

```
mysql> use entri_assignment;  
Database changed
```

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
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 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
101	Neena	Kochhar	NKOCHHAR	515.123.4568	1989-11-21	AD_VP	17000	NULL	100	20

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

```
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
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 (0.00 sec)
```

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
108	Nancy	Greenberg	NGREENBE	515.124.4569	1994-08-17	FI_MGR	12000	NULL	101	100

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

```
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
108	Nancy	Greenberg	FI_MGR	12000

```
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
101	Neena	Kochhar	100	17000
102	Lex	De Haan	100	17000
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	Faviet	108	9000
110	John	Chen	108	8200
111	Ismael	Sciarra	108	7700
114	Den	Raphaely	100	11000
115	Alexander	Khoo	114	3100
116	Shelli	Baida	114	2900
117	Sigal	Tobias	114	2800
118	Guy	Himuro	114	2600
119	Karen	Colmenares	114	2500
120	Matthew	Weiss	100	8000
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
130	Mozhe	Atkinson	121	2800

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

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

```
mysql> SELECT CONCAT(e.first_name,' ',e.last_name) as employee_name,e.salary employee_salary,
-> CONCAT(m.first_name,' ',m.last_name) as manager_name,m.salary manager_salary
-> FROM employees e
-> inner join employees m on m.Employee_id = e.manager_id;
```

employee_name	employee_salary	manager_name	manager_salary
Nancy Greenberg	12000	Neena Kochhar	17000
Daniel Faviert	9000	Nancy Greenberg	12000
John Chen	8200	Nancy Greenberg	12000
Ismael Sciarra	7700	Nancy Greenberg	12000
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
Julia Nayer	3200	Matthew Weiss	8000
Irene Mikkilineni	2700	Matthew Weiss	8000
James Landry	2400	Matthew Weiss	8000
Steven Markle	2200	Matthew Weiss	8000

13 rows in set (0.00 sec)

6.Create a view for the above query

```
mysql> create view employee_manager_salary as
-> select concat(e.first_name,' ',e.last_name) as employee_name,e.salary employee_salary,
-> concat(m.first_name,' ',m.last_name) as manager_name,m.salary manager_salary
-> from employees e
-> inner join employees m on m.Employee_id = e.manager_id;
```

Query OK, 0 rows affected (0.02 sec)

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

Tables_in_entri_assignment	Table_type
department	BASE TABLE
employee_manager_salary	VIEW
employees	BASE TABLE

3 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_name,count(employee_name) employee_count
-> from employee_manager_salary
-> group by manager_name
-> order by employee_count desc;
```

manager_name	employee_count
Den Raphaely	5
Matthew Weiss	4
Nancy Greenberg	3
Neena Kochhar	1

4 rows in set (0.00 sec)

8.Find the count of employees in each department

```
mysql> select department_name,count(Employee_id) employee_count
-> from department d
-> left join employees e on d.department_id = e.department_id
-> group by d.department_id,department_name
-> order by employee_count desc;
```

department_name	employee_count
Shipping	5
Purchasing	3
Human Resources	3
IT	3
Sales	2
Payroll	2
Marketing	1
Public Relations	1
Executive	1
Finance	1
Accounting	1
Corporate Tax	1
Benifits	1
Treasury	0
Control And Creadit	0
Shareholder Services	0

16 rows in set (0.00 sec)

9. Get the count of employees hired year wise

```
mysql> select year(hire_date) year, count(employee_id) employee_count  
-> from employees  
-> group by year(hire_date)  
-> order by year(hire_date);
```

year	employee_count
1989	1
1991	1
1993	1
1994	3
1995	2
1996	1
1997	8
1998	3
1999	4
2000	1

10 rows in set (0.00 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 GetEmployeesCountByYear(IN input_year INT, OUT employee_count INT)
-> BEGIN
-> select count(*) INTO employee_count from employees where year(hire_date) = input_year;
-> END //
Query OK, 0 rows affected (0.02 sec)

mysql> DELIMITER ;
mysql>
```

11. Select the employees whose first_name contains “an”

```
mysql> select concat(first_name, ' ', last_name) as employee_name
-> from employees
-> where first_name like '%an%';
```

employee_name
Diana Lorentz
Nancy Greenberg
Daniel Faviat
Alexander Khoo
Shanta Vollman

```
5 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 'phone number'
-> FROM employees;
```

first_name	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)
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)

25 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 (0.00 sec)

14. Find the maximum salary from each department.


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

Department_name	salary
Marketing	17000
Purchasing	17000
IT	6000
Human Resources	7900
Finance	12000
Payroll	9000
Benifits	7700
Sales	5800
Public Relations	2900
Corporate Tax	2500
Shipping	8000
Executive	2400
Accounting	2800

13 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
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 (0.00 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
101	Neena	Kochhar	NKOCHHAR	515.123.4568	1989-11-21	AD_VP	17000	NULL	100	20

1 row 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
101	Neena	Kochhar	NKOCHHAR	515.123.4568	1989-11-21	AD_VP	17000	NULL	100	20
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

5 rows in set (0.00 sec)

```
mysql>
```