

Creating table Employees

```
mysql> create table Employees(EMPLOYEE_ID int,
-> FIRST_NAME varchar(20),
-> LAST_NAME varchar(25),
-> EMAIL varchar(25),
-> PHONE_NUMBER varchar(20),
-> HIRE_DATE date,
-> JOB_ID varchar(10),
-> SALARY float,
-> COMMISSION_PCT float,
-> MANAGER_ID int,
-> DEPARTMENT_ID int);
Query OK, 0 rows affected (0.10 sec)
```

Select ***From Employees;**

```
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	971123546	2003-06-17	AD_PRES	24000	0	0	90
101	Neena	Kochhar	NKOCHHAR	515123568	1987-06-18	AD_VP	17000	0	100	90
102	Lex	De Haan	LDEHAAN	5151234569	1987-06-19	AD_VP	17000	0	100	90
103	Alexander	Hunold	AHUNOLD	5904234567	1987-06-20	IT_PROG	9000	0	102	60
104	Bruce	Ernst	BERNST	5904234568	1987-06-21	IT_PROG	6000	0	103	60
105	David	Austin	DAUSTIN	5904234569	1987-06-22	IT_PROG	4800	0	103	60

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

1. Write a query to list the number of jobs available in the employees table

Query :

Select count(DISTINCT job_id) as Jobs_Count

From employees;

Output :

```
mysql> Select count(DISTINCT job_id) as Jobs_Count
-> From employees;
```

Jobs_Count
5

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

2. Write a query to get the total salaries payable to employees.

Query :

Select **sum(salary)**

From Employees;

Output :

```
mysql> Select sum(salary)
      -> From Employees;
+-----+
| sum(salary) |
+-----+
|         77800 |
+-----+
1 row in set (0.00 sec)
```

3. Write a query to get the minimum salary from employees table

Query :

Select **min(salary)**

From Employees;

Output :

```
mysql> Select min(salary)
      -> From Employees;
+-----+
| min(salary) |
+-----+
|         4800 |
+-----+
1 row in set (0.03 sec)
```

4. Write a query to get the maximum salary of an employee working as a Programmer.

Query :

Select max(salary)

From Employees

Where job_id = 'it_prog';

Output :

```
mysql> Select max(salary)
      -> From Employees
      -> Where job_id = 'it_prog';
+-----+
| max(salary) |
+-----+
|          9000 |
+-----+
1 row in set (0.00 sec)
```

5. Write a query to get the average salary and number of employees working the department 90.

Query :

Select round(avg(salary),2) as avg_salary , count(*) as no_of_emp

From Employees

Where department_id=90;

Output :

```
mysql> Select round(avg(salary),2) as avg_salary , count(*) as no_of_emp
      -> From Employees
      -> Where department_id=90;
+-----+-----+
| avg_salary | no_of_emp |
+-----+-----+
|    19333.33 |          3 |
+-----+-----+
1 row in set (0.00 sec)
```

6. Write a query to get the highest, lowest, sum, and average salary of all employees.

Query :

```
Select ROUND(MAX(salary),0) 'Maximum',  
ROUND(MIN(salary),0) 'Minimum',  
ROUND(SUM(salary),0) 'Sum',  
ROUND(AVG(salary),0) 'Average'  
From employees;
```

Output :

```
mysql> Select ROUND(MAX(salary),0) 'Maximum',  
-> ROUND(MIN(salary),0) 'Minimum',  
-> ROUND(SUM(salary),0) 'Sum',  
-> ROUND(AVG(salary),0) 'Average'  
-> From employees;  
+-----+-----+-----+-----+  
| Maximum | Minimum | Sum   | Average |  
+-----+-----+-----+-----+  
|    24000 |     4800 | 77800 |    12967 |  
+-----+-----+-----+-----+  
1 row in set (0.00 sec)
```

7. Write a query to get the number of employees with the same job.

Query :

```
Select job_id, COUNT(*)
```

```
From Employees
```

```
Group by job_id;
```

Output :

```
mysql> Select job_id, COUNT(*)  
-> From Employees  
-> Group by job_id;  
+-----+-----+  
| job_id | COUNT(*) |  
+-----+-----+  
| AD_PRES |         1 |  
| AD_VP   |         2 |  
| IT_PROG |         3 |  
+-----+-----+  
3 rows in set (0.01 sec)
```

8. Write a query to get the difference between the highest and lowest salaries.

Query :

```
SELECT MAX(salary) - MIN(salary) DIFFERENCE  
FROM employees;
```

Output :

```
mysql> SELECT MAX(salary) - MIN(salary) DIFFERENCE  
-> FROM employees;  
+-----+  
| DIFFERENCE |  
+-----+  
|      19200 |  
+-----+  
1 row in set (0.00 sec)
```

9. Write a query to find the manager ID and the salary of the lowest-paid employee for that manager.

Query :

```
Select manager_id, MIN(salary)as Min_Salary  
From employees  
GROUP BY manager_id  
ORDER BY MIN(salary) DESC;
```

Output :

```
mysql> Select manager_id, MIN(salary)as Min_Salary  
-> From employees  
-> GROUP BY manager_id  
-> ORDER BY MIN(salary) DESC;  
+-----+-----+  
| manager_id | Min_Salary |  
+-----+-----+  
|          0 |      24000 |  
|         100 |      17000 |  
|         102 |       9000 |  
|         103 |       4800 |  
+-----+-----+  
4 rows in set (0.00 sec)
```

10. Write a query to get the department ID and the total salary payable in each department.

Query :

```
Select department_id, SUM(salary) as Toal_salary
From employees
GROUP BY department_id;
```

Output :

```
mysql> Select department_id, SUM(salary) as Toal_salary
-> From employees
-> GROUP BY department_id;
+-----+-----+
| department_id | Toal_salary |
+-----+-----+
|          90  |      58000 |
|          60  |      19800 |
+-----+-----+
2 rows in set (0.00 sec)
```

11. Write a query to get the average salary for each job ID excluding programmer.

Query :

```
Select job_id, AVG(salary) as Avg_Salary
From employees
Where job_id <> 'IT_PROG'
GROUP BY job_id;
```

Output :

```
mysql> Select job_id, AVG(salary) as Avg_Salary
-> From employees
-> Where job_id <> 'IT_PROG'
-> GROUP BY job_id;
+-----+-----+
| job_id  | Avg_Salary |
+-----+-----+
| AD_PRES |      24000 |
| AD_VP   |      17000 |
+-----+-----+
2 rows in set (0.00 sec)
```

12. Write a query to get the total salary, maximum, minimum, average salary of employees (job ID wise), for department ID 90 only.

Query:

```
select job_id, SUM(salary) as Total_salary,  
       AVG(salary) as Avg_salary,  
       MAX(salary) as Max_Salary,  
       MIN(salary) as Min_Salary  
from employees  
where department_id = '90'  
GROUP BY job_id;
```

Output :

```
mysql> select job_id, SUM(salary) as Total_salary,  
-> AVG(salary) as Avg_salary, MAX(salary) as Max_Salary, MIN(salary) as Min_Salary  
-> from employees  
-> where department_id = '90'  
-> GROUP BY job_id;
```

job_id	Total_salary	Avg_salary	Max_Salary	Min_Salary
AD_PRES	24000	24000	24000	24000
AD_VP	34000	17000	17000	17000

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

13. Write a query to get the job ID and maximum salary of the employees where maximum salary is greater than or equal to \$4000.

Query :

```
select job_id, MAX(salary)
from employees
GROUP BY job_id
HAVING MAX(salary) >=4000;
```

Output :

```
mysql> select job_id, MAX(salary)
-> from employees
-> GROUP BY job_id
-> HAVING MAX(salary) >=4000;
+-----+-----+
| job_id | MAX(salary) |
+-----+-----+
| AD_PRES |          24000 |
| AD_VP   |          17000 |
| IT_PROG |           9000 |
+-----+-----+
3 rows in set (0.03 sec)
```

14. Write a query to get the average salary for all departments employing more than 10 employees.

Query :

```
select department_id, ROUND(AVG(salary),2) as Avg_Salary, COUNT(*) as
No_of_emp
from employees
GROUP BY department_id
HAVING COUNT(*) > 10;
```

Output :

```
mysql> select department_id, ROUND(AVG(salary),2) as Avg_Salary, COUNT(*) as No_of_emp
-> from employees
-> GROUP BY department_id
-> HAVING COUNT(*) > 10;
+-----+-----+-----+
| department_id | Avg_Salary | No_of_emp |
+-----+-----+-----+
|          50 |    4009.09 |          11 |
+-----+-----+-----+
1 row in set (0.00 sec)
```