mysql> SHOW DATABASES;

Database
emp
information_schema
mysql
performance_schema
sys

5 rows in set (0.02 sec)

mysql> USE MYSQL;

Database changed

mysql> CREATE TABLE COMPANY (ID INT,ENAME VARCHAR(20),SALARY INT,LOC VARCHAR(20));

Query OK, 0 rows affected (0.17 sec)

mysql> DESCRIBE COMPANY;

Field	Type	Null	Key	Default	Extra
ID	int	YES	NULL		
ENAME	varchar(20)	YES	NULL		
SALARY	int	YES	NULL		
LOC	varchar(20)	YES	NULL		

4 rows in set (0.01 sec)

mysql> INSERT INTO COMPANY VALUES(434,'RAKESH',3500,'PUNE');

Query OK, 1 row affected (0.04 sec)

mysql> SELECT * FROM COMPANY;

ID	ENAME	SALARY	LOC
434	RAKESH	3500	|PUNE

1 row in set (0.00 sec)

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```
mysql> INSERT INTO COMPANY
VALUES(923,'MAHESH',1200,'MUMBAI');
Query OK, 1 row affected (0.04 sec)

mysql> INSERT INTO COMPANY
VALUES(103,'UMESH',2300,'BANGLORE');
Query OK, 1 row affected (0.04 sec)

mysql> INSERT INTO COMPANY VALUES(104,'',5200,'BENGAL');
Query OK, 1 row affected (0.04 sec)

mysql> INSERT INTO COMPANY VALUES(105,'RAVI',7300,'CHENNAI');
Query OK, 1 row affected (0.04 sec)

mysql> INSERT INTO COMPANY VALUES(106,'POOJA',9200,'PUNE');
Query OK, 1 row affected (0.05 sec)

mysql> INSERT INTO COMPANY
VALUES(107,'SHAMIKA',3800,'MUMBAI');
Query OK, 1 row affected (0.04 sec)
```

mysql> INSERT INTO COMPANY
VALUES(108,'SAHIL',9500,'BANGLORE');

Query OK, 1 row affected (0.04 sec)

mysql> INSERT INTO COMPANY VALUES(109,'SWAPNIL',6400,'PUNE');

Query OK, 1 row affected (0.05 sec)

mysql> SELECT * FROM COMPANY;

ID	ENAME	SALARY	LOC
434	RAKSESH	3500	PUNE
923	MAHESH	1200	MUMBAI
103	UMESH	2300	BANGLORE
104	RAHUL	5200	BENGAL
105	RAVI	7300	CHENNAI
106	POOJA	9200	PUNE
107	SHAMIKA	3800	MUMBAI
108	SAHIL	9500	BANGLORE
109	SWAPNIL	6400	PUNE

9 rows in set (0.00 sec)

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MULTI-ROW FUNCTIONS

MAX()

SYNTAX:

SELECT MAX(COL_NAME) FROM TABLE_NAME;

IT RETURNS MAXIMUM VALUE OF SELECTED COLUMN.

Q: **DISPLAY THE MAXIMUM SALARY IN COMPANY TABLE?**

mysql> SELECT MAX(SALARY) FROM COMPANY;

MAX(SALARY)
9500

1 row in set (0.00 sec)

MIN()

SYNTAX:

SELECT MIN(COL_NAME) FROM TABLE_NAME;

IT RETURNS MINIMUM VALUE OF SELECTED COLUMN.

Q:DISPLAY THE MINIMUM SALRY FROM COMPANY TABLE?

mysql> SELECT MIN(SALARY) FROM COMPANY;

MIN(SALARY
1200

1 row in set (0.00 sec)

SUM()

SELECT SUM(COL_NAME) FROM TABLE_NAME;

It return the total addition of all data in that column

Q: DISPLAY THE TOTAL COSTING OF THE COMPANY ON EMPLOYEES?

mysql> SELECT SUM(SALARY) FROM COMPANY;

SUM(SALARY)
48400

1 row in set (0.00 sec)

AVG()

SELECT AVG(COL_NAME) FROM TABLE_NAME;

It return the AVERAGE of all data in that column

mysql> SELECT AVG(SALARY) FROM COMPANY;

AVG(SALARY)
5377.7778

1 row in set (0.00 sec)

COUNT()

SELECT COUNT(COL_NAME) FROM TABLE_NAME;

It return the TOTAL ROW in that column.

Q:DISPLAY HOW MANY EMPLOYEES IN THE COMPANY?

mysql> SELECT COUNT(ID) FROM COMPANY;

COUNT(ID
9

1 row in set (0.00 sec)

Q:DISPLAY THE COUNT OF SALARIES GIVEN TO THE EMPLOYEE?

mysql> SELECT COUNT(SALARY) FROM COMPANY;

COUNT(SALARY
9

1 row in set (0.00 sec)

→USING ALIAS(PROVIDES A TOPIC NAME FOR THE RETURNED DATA)

KEYWORD 'AS'

Q: DISPLAY MAXIMUM SALARY FROM COMPANY AS MAXIMUM SALARY?

mysql> SELECT MAX(SALARY) AS "MAXIMUM SALARY" FROM COMPANY;

MAXIMUM SALARY
9500

1 row in set (0.00 sec)

Q: DISPLAY MINNIMUM SALARY FROM COMPANY AS MINIMUM SALARY?

mysql> SELECT MIN(SALARY) AS "MINIMUM SALARY" FROM COMPANY;

MINIMUM SALARY
1200

1 row in set (0.00 sec)

Q: DISPLAY SUM OF SALARY FROM COMPANY AS TOTAL SALARY?

```
mysql> SELECT SUM(SALARY) AS "TOTAL SALARY" FROM
COMPANY;
```

TOTAL SALARY
48400

1 row in set (0.00 sec)

Q: DISPLAY COUNT OF EMPLOYEES FROM COMPANY AS TOTAL EMPLOYEES?

```
mysql> SELECT COUNT(ID) AS "TOTAL EMPLOYEE" FROM COMPANY;
```

TOTAL EMPLOYEE
9

1 row in set (0.00 sec)

Q: DISPLAY THE AVERAGE SALARY OF EMPLOYEE AS AVERAGE SALARY?

```
mysql> SELECT AVG(SALARY) AS "AVERAGE SALARY" FROM COMPANY;
```

AVERAGE SALARY
5377.7778

1 row in set (0.00 sec)

Q:DISPLAY THE ENAME OF THE EMPLOYEE WHO HAS MAXIMUM SALARY?

mysql> SELECT ENAME,SALARY FROM COMPANY **WHERE SALARY**=(SELECT MAX(SALARY) FROM COMPANY);

ENAME	SALARY
SAHIL	9500

1 row in set (0.00 sec)

Q: DISPLAY NAME AND SALARY OF EMPLOYEE HAVING MINIMUM SALARY?

mysql> SELECT ENAME,SALARY FROM COMPANY **WHERE SALARY=**(SELECT MIN(SALARY) FROM COMPANY);

ENAME	SALARY
MAHESH	1200

1 row in set (0.00 sec)

*SUB-QUERY: A QUERY INSIDE ANOTHER QUERY IS CALLED AS SUB-QUERY.

Q:DISPLAY NAME AND SALARY OF EMPLOYEES HAVING MIN SALARY?

```
mysql> INSERT INTO COMPANY
VALUES(111,'SOHAN',1200,'MUMBAI');
```

Query OK, 1 row affected (0.04 sec)

```
mysql> SELECT * FROM COMPANY;
```

ID	ENAME	SALARY	LOC
434	RAKSESH	3500	PUNE
923	MAHESH	1200	MUMBAI
103	UMESH	2300	BANGLORE
104	RAHUL	5200	BENGAL
105	RAVI	7300	CHENNAI
106	POOJA	9200	PUNE
107	SHAMIKA	3800	MUMBAI
108	SAHIL	9500	BANGLORE
109	SWAPNIL	6400	PUNE
111	SOHAN	1200	MUMBAI

10 rows in set (0.00 sec)

mysql> SELECT ENAME FROM COMPANY **WHERE SALARY**=(SELECT MIN(SALARY) FROM COMPANY);

ENAME
MAHESH
SOHAN

2 rows in set (0.00 sec)

mysql> SELECT ENAME,SALARY FROM COMPANY **WHERE SALARY**=(SELECT MIN(SALARY) FROM COMPANY);

ENAME	SALARY
MAHESH	1200
SOHAN	1200

2 rows in set (0.00 sec)

mysql> SELECT MIN(SALARY) FROM COMPANY;

MIN(SALARY)
1200

1 row in set (0.00 sec)

- **Multiple Row Functions in Oracle**

The Multiple Row Functions in Oracle are used to return either group of values (or) a single value. These functions are basically operated on a set of rows and return one result or one result per group. This is a powerful feature provided by oracle because these Multiple Row Functions allow us to generate subtotals, max, min, sums, and averages within the SQL that is retrieving the data. The Multiple row function in Oracle is also called group functions or it is also called aggregate functions.