

MYSQL

VINOTH DSILVA.I

FEB-03-2023

1. Aggregate Functions:

In database management an aggregate function is a function where the values of multiple rows are grouped together as input on certain criteria to form a single value of more significant meaning.

Here Various Aggregate Functions:

- Count()
- Sum()
- Avg()
- Min()
- Max()

a)Count - The COUNT() function returns the number of rows that matches a specified criterion.

```
MariaDB [company]> select * from Employee;
+-----+-----+-----+-----+
| ID    | Name      | Designation      | Salary |
+-----+-----+-----+-----+
| 1     | Vinoth    | Data_Analyst     | 25000  |
| 2     | Karthi    | Software_Testing | 46000  |
| 3     | Satishwaran | Mis_Executive    | 24000  |
| 4     | Santhosh  | Python_developer | 58000  |
| 5     | Johnson   | HR               | 36000  |
+-----+-----+-----+-----+
5 rows in set (0.019 sec)

MariaDB [company]> select count(Salary) from Employee;
+-----+
| count(Salary) |
+-----+
| 5             |
+-----+
1 row in set (0.122 sec)
```

b)Sum -The SUM() function returns the total sum of a numeric column.

```
MariaDB [company]> select * from Employee;
+-----+-----+-----+-----+
| ID    | Name      | Designation      | Salary |
+-----+-----+-----+-----+
| 1     | Vinoth    | Data_Analyst     | 25000  |
| 2     | Karthi    | Software_Testing | 46000  |
| 3     | Satishwaran | Mis_Executive    | 24000  |
| 4     | Santhosh  | Python_developer | 58000  |
| 5     | Johnson   | HR               | 36000  |
+-----+-----+-----+-----+
5 rows in set (0.001 sec)

MariaDB [company]> select sum(Salary) from Employee;
+-----+
| sum(Salary) |
+-----+
| 189000      |
+-----+
1 row in set (0.001 sec)
```

c)Max -The MAX() function returns the largest value of the selected column.

```
MariaDB [company]> select * from Employee;
+-----+-----+-----+-----+
| ID    | Name      | Designation      | Salary |
+-----+-----+-----+-----+
| 1     | Vinoth    | Data_Analyst     | 25000  |
| 2     | Karthi    | Software_Testing | 46000  |
| 3     | Satishwaran | Mis_Executive    | 24000  |
| 4     | Santhosh  | Python_developer | 58000  |
| 5     | Johnson   | HR               | 36000  |
+-----+-----+-----+-----+
5 rows in set (0.005 sec)

MariaDB [company]> select max(Salary) from Employee;
+-----+
| max(Salary) |
+-----+
| 58000       |
+-----+
1 row in set (0.003 sec)
```

d)Min - The MIN() function returns the smallest value of the selected column.

```
MariaDB [company]> select * from Employee;
```

ID	Name	Designation	Salary
1	Vinoth	Data_Analyst	25000
2	Karthi	Software_Testing	46000
3	Satishwaran	Mis_Executive	24000
4	Santhosh	Python_developer	58000
5	Johnson	HR	36000

```
5 rows in set (0.001 sec)
```



```
MariaDB [company]> select min(Salary) from Employee;
```

min(Salary)
24000

e)Avg - The AVG() function returns the average value of a numeric column.

```
MariaDB [company]> select * from Employee;
```

ID	Name	Designation	Salary
1	Vinoth	Data_Analyst	25000
2	Karthi	Software_Testing	46000
3	Satishwaran	Mis_Executive	24000
4	Santhosh	Python_developer	58000
5	Johnson	HR	36000

```
5 rows in set (0.002 sec)
```



```
MariaDB [company]> select avg(Salary) from Employee;
```

avg(Salary)
37800.0000

```
1 row in set (0.004 sec)
```