3. Queries using aggregate functions(COUNT,AVG,MIN,MAX,SUM),Group by, Order by.

Employee (E_id, E_name, Age, Salary)

1. Create Employee table containing all Records E_id, E_name, Age, Salary.

2. Count number of employee names from employee table

3. Find the Maximum age from employee table.

4. Find the Minimum age from employee table.

5. Find salaries of employee in Ascending Order.

6. Find grouped salaries of employees.

1. Create Employee table containing all Records E_id, E_name, Age, Salary.

```
CREATE TABLE Employee (
    E_id INT PRIMARY KEY,
    E_name VARCHAR(255),
    Age INT,
    Salary DECIMAL(10, 2)
);
```

```
DESC Employee;
```

```
+--------+---------------+------+-----+---------+-------+
| Field  | Type          | Null | Key | Default | Extra |
+--------+---------------+------+-----+---------+-------+
| E_id   | int           | NO   | PRI | NULL    |       |
| E_name | varchar(255)  | YES  |     | NULL    |       |
| Age    | int           | YES  |     | NULL    |       |
| Salary | decimal(10,2) | YES  |     | NULL    |       |
+--------+---------------+------+-----+---------+-------+
```

```sql
INSERT INTO Employee (E_id, E_name, Age, Salary)
VALUES
    (1, 'Samarth', 30, 50000.00),
    (2, 'Ramesh Kumar', 25, 45000.00),
    (3, 'Seema Banu', 35, 60000.00),
    (4, 'Dennis Anil', 28, 52000.00),
    (5, 'Rehman Khan', 32, 58000.00),
    (6, 'Pavan Gowda', 40, 70000.00),
    (7, 'Shruthi Bhat', 27, 48000.00),
    (8, 'Sandesh Yadav', 29, 51000.00),
    (9, 'Vikram Acharya', 33, 62000.00),
    (10, 'Praveen Bellad', 26, 46000.00),
    (11, 'Sophia Mary', 31, 55000.00),
    (12, 'Darshan Desai', 34, 63000.00);
```

```sql
SELECT * FROM Employee;
```

```
+------+----------------+------+----------+
| E_id | E_name         | Age  | Salary   |
+------+----------------+------+----------+
|    1 | Samarth        |   30 | 50000.00 |
|    2 | Ramesh Kumar   |   25 | 45000.00 |
|    3 | Seema Banu     |   35 | 60000.00 |
|    4 | Dennis Anil    |   28 | 52000.00 |
|    5 | Rehman Khan    |   32 | 58000.00 |
|    6 | Pavan Gowda    |   40 | 70000.00 |
|    7 | Shruthi Bhat   |   27 | 48000.00 |
|    8 | Sandesh Yadav  |   29 | 51000.00 |
|    9 | Vikram Acharya |   33 | 62000.00 |
|   10 | Praveen Bellad |   26 | 46000.00 |
|   11 | Sophia Mary    |   31 | 55000.00 |
|   12 | Darshan Desai  |   34 | 63000.00 |
+------+----------------+------+----------+
```

2. Count number of employee names from employee table.

```sql
SELECT COUNT(E_name) AS TotalEmployees
FROM Employee;
```

```
+-----------------+
| TotalEmployees |
+-----------------+
|             12 |
+-----------------+
```

3. Find the Maximum age from employee table.

```
SELECT MAX(Age) AS MaxAge
FROM Employee;
```

```
+---------+
| MaxAge |
+---------+
|      40 |
+---------+
```

4. Find the Minimum age from employee table.

```
SELECT MIN(Age) AS MinAge
FROM Employee;
```

```
+---------+
| MinAge |
+---------+
|      25 |
+---------+
```

5. Find salaries of employee in Ascending Order.

```
SELECT E_name, Salary
FROM Employee
ORDER BY Salary ASC;
```

```
+-----------------+------------+
| E_name          | Salary     |
+-----------------+------------+
| Ramesh Kumar    | 45000.00   |
| Praveen Bellad  | 46000.00   |
| Shruthi Bhat    | 48000.00   |
| Samarth         | 50000.00   |
| Dennis Anil     | 52000.00   |
| Sandesh Yadav   | 52000.00   |
| Sophia Mary     | 55000.00   |
| Rehman Khan     | 58000.00   |
| Seema Banu      | 62000.00   |
| Vikram Acharya  | 62000.00   |
| Darshan Desai   | 63000.00   |
| Pavan Gowda     | 70000.00   |
+-----------------+------------+
```

6. Find grouped salaries of employees.

```sql
SELECT Salary, COUNT(*) AS EmployeeCount
FROM Employee
GROUP BY Salary;
```

```
+-----------+---------------+
| Salary    | EmployeeCount |
+-----------+---------------+
| 50000.00  |             1 |
| 45000.00  |             1 |
| 62000.00  |             2 |
| 52000.00  |             2 |
| 58000.00  |             1 |
| 70000.00  |             1 |
| 48000.00  |             1 |
| 46000.00  |             1 |
| 55000.00  |             1 |
| 63000.00  |             1 |
+-----------+---------------+
```

- COUNT(E_name) counts the number of non-NULL values in the E_name column.
- MAX(Age) finds the maximum age among the employees.
- MIN(Age) finds the minimum age among the employees.

- ORDER BY Salary ASC sorts the employees based on their salaries in ascending order.
- GROUP BY Salary groups employees by their salaries and counts the number of employees for each salary.