### DAY ☀️: \*\*Task – Aggregate Functions in SQL\*\*

```

Created by :

Name: Dhiraj Kr.

Profession: Data Scientist & GenAI Developer

```

---

### ⚡ Task 1: Count Total Students

\*\*Question:\*\* Write a query to count how many students are in the `students` table.

\*\*Requirements:\*\*

- Use `COUNT(\*)`

**Query : SELECT COUNT(\*) Student\_Count FROM student;**

---

### ⚡ Task 2: Total of All Marks

\*\*Question:\*\* Calculate the total marks scored by all students.

\*\*Requirements:\*\*

- Use `SUM(marks)`

**Query : SELECT SUM(marks) Total\_Marks FROM student;**

---

### ⚡ Task 3: Find Average Age

\*\*Question:\*\* Show the average age of all students.

\*\*Requirements:\*\*

- Use `AVG(age)`

**Query : SELECT AVG(age) Average\_Age FROM student;**

---

### ⚡ Task 4: Find Maximum Marks

\*\*Question:\*\* Display the highest marks from the students table.

\*\*Requirements:\*\*

- Use `MAX(marks)`

**Query : SELECT MAX(marks) Highest\_Marks FROM student;**

---

### ⚡ Task 5: Find Minimum Age

\*\*Question:\*\* Show the smallest age among students.

\*\*Requirements:\*\*

- Use `MIN(age)`

**Query : SELECT MIN(age) Youngest\_student FROM student;**

---

### ⚡ Task 6: Use COUNT with Column

\*\*Question:\*\* Count how many students have marks (exclude NULLs).

\*\*Requirements:\*\*

- Use `COUNT(marks)`

**Query : SELECT COUNT(marks) Student\_with\_Marks FROM student;**

---

### ⚡ Task 7: Alias in Aggregate

\*\*Question:\*\* Show the total marks as `Total\_Score`.

\*\*Requirements:\*\*

- Use `AS` to rename the result column

**Query : SELECT SUM(marks) Total\_Score FROM student;**

---

### ⚡ Task 8: Combine AVG with ROUND

\*\*Question:\*\* Display average marks rounded to 2 decimal places.

\*\*Requirements:\*\*

- Use `ROUND(AVG(marks), 2)`

**Query : SELECT ROUND(marks,2) Total\_Score FROM student;**

---

### ⚡ Task 9: Insert & Aggregate

\*\*Question:\*\* Insert a student `(6, 'Zoya', 20, 84)` and calculate the new total number of students.

\*\*Requirements:\*\*

- Perform `INSERT`, then `COUNT(\*)`

**Query : INSERT INTO students**

**VALUES(6,’Zoya’,20,84)**

**SELECT COUNT(\*) New\_Total\_Students FROM student;**

---

### ⚡ Task 10: Use All Aggregates Together

\*\*Question:\*\* Write one query that shows `MIN(marks)`, `MAX(marks)`, `AVG(marks)`, and `SUM(marks)` with column aliases.

\*\*Requirements:\*\*

- Use all four aggregate functions in one `SELECT`

**Query :**

**SELECT ‘Youngest Age’ as Category ,MIN(age) as Aggregated\_Value FROM student**

**UNION ALL**

**SELECT ‘Max\_Score’ as Category ,MAX(marks) as Aggregated\_Value FROM student**

**UNION ALL**

**SELECT ‘Average Marks’ as Category ,AVG(marks) as Aggregated\_Value FROM student**

**UNION ALL**

**SELECT ‘Total\_Marks’ as Category ,SUM(marks) as Aggregated\_Value FROM student;**

---

\*\*End of Document\*\* ✨