

## Task 4: Aggregate Functions and Grouping












### COUNT() – Count number of enrollments per student

```
SELECT s.name, COUNT(e.enrollment_id) AS total_enrollments
```

```
FROM enrollments e
```

```
JOIN students s ON e.student_id = s.student_id
```

```
GROUP BY s.name;
```

Grid view		Form view
		
		
		
		Total rows loaded: 4
1	name	total enrollments
2	Amit Patel	2
3	Bhavna Shah	1
4	Chetan Mehta	1
5	Deepa Rana	1

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### SUM() – Total credits of courses each student has enrolled in












```
SELECT s.name, SUM(c.credits) AS total_credits
```

```
FROM enrollments e
```

```
JOIN students s ON e.student_id = s.student_id
```










```
JOIN courses c ON e.course_id = c.course_id
```

```
GROUP BY s.name;
```

Grid view		Form view
		
		
		
		Total rows loaded: 4
1	name	total credits
2	Amit Patel	7
3	Bhavna Shah	4
4	Chetan Mehta	3
5	Deepa Rana	2

### **AVG() – Average credits of courses each student has enrolled in**










```
SELECT s.name, AVG(c.credits) AS avg_credits  
FROM enrollments e  
JOIN students s ON e.student_id = s.student_id  
JOIN courses c ON e.course_id = c.course_id  
GROUP BY s.name;
```

Grid view		Form view
		
		
	1	
	Total rows loaded: 4	
name		avg credits
1	Amit Patel	3.5
2	Bhavna Shah	4
3	Chetan Mehta	3
4	Deepa Rana	2

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### **MIN() – Find the earliest enrollment date for each student**

```
SELECT s.name, MIN(e.enrollment_date) AS first_enrollment  
FROM enrollments e  
JOIN students s ON e.student_id = s.student_id  
GROUP BY s.name;
```

Grid view		Form view
		
		
	1	
	Total rows loaded: 4	
name		first enrollment
1	Amit Patel	2025-01-10
2	Bhavna Shah	2025-01-12
3	Chetan Mehta	2025-01-13
4	Deepa Rana	2025-01-14










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### **MAX() – Find the latest enrollment date for each student**

```
SELECT s.name, MAX(e.enrollment_date) AS latest_enrollment  
FROM enrollments e
```

JOIN students s ON e.student\_id = s.student\_id

GROUP BY s.name;

Grid view		Form view	
			
		1	
		Total rows loaded: 4	
	name	latest enrollment	
1	Amit Patel	2025-01-11	
2	Bhavna Shah	2025-01-12	
3	Chetan Mehta	2025-01-13	
4	Deepa Rana	2025-01-14	

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### Multiple Aggregates Together

SELECT s.name,

COUNT(e.enrollment\_id) AS total\_courses,

SUM(c.credits) AS total\_credits,

AVG(c.credits) AS avg\_credits,

MIN(e.enrollment\_date) AS first\_enrollment,

MAX(e.enrollment\_date) AS last\_enrollment

FROM enrollments e


JOIN students s ON e.student\_id = s.student\_id


JOIN courses c ON e.course\_id = c.course\_id


GROUP BY s.name;


Grid view


Form view














1















Total rows loaded: 4

	name	total cours	total credit	avg credits	first enrolln	last enrolln
1	Amit Patel	2	7	3.5	2025-01-10	2025-01-11
2	Bhavna Shah	1	4	4	2025-01-12	2025-01-12
3	Chetan Mehta	1	3	3	2025-01-13	2025-01-13
4	Deepa Rana	1	2	2	2025-01-14	2025-01-14

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**HAVING – Show only students with more than 1 enrollment**

```
SELECT s.name, COUNT(e.enrollment_id) AS total_enrollments
FROM enrollments e
JOIN students s ON e.student_id = s.student_id
GROUP BY s.name
HAVING COUNT(e.enrollment_id) > 1;
```

Grid view   Form view		
     1    Total rows loaded: 1		
	name	total enrollments
1	Amit Patel	2