

# # Week 3: Grouping Your Expenses for Smarter Spending

## ## Challenges:

### \*\*1.1.\*\* Total Spent per Category:

Write a query to find the total amount you spent in each category (Groceries, Entertainment, etc.). Hint: Use GROUP BY category and SUM(amount).

```
SELECT category, SUM(amount) AS total_spent
```

```
FROM expenses
```

```
GROUP BY category;
```

```
SELECT category, SUM(amount) AS total_spent FROM expenses GROUP BY category;
```

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☐ Show all

Number of rows: 

25

Filter rows: 

Search this table

Extra options

					category	total_spent		
<input type="checkbox"/>		Edit		Copy		Delete	Bills	75.40
<input type="checkbox"/>		Edit		Copy		Delete	Clothing	15.99
<input type="checkbox"/>		Edit		Copy		Delete	Dining Out	30.00
<input type="checkbox"/>		Edit		Copy		Delete	Entertainment	57.50
<input type="checkbox"/>		Edit		Copy		Delete	Groceries	55.75
<input type="checkbox"/>		Edit		Copy		Delete	Other	22.00
<input type="checkbox"/>		Edit		Copy		Delete	Transportation	5.00
<input type="checkbox"/>		Edit		Copy		Delete	Travel	350.00

### \*\*1.2.\*\* Average Expense per Category:

Now, let's see the average cost for each category. Write a query to find the average expense amount for each category. Hint: Use GROUP BY category and AVG(amount).

```
SELECT category, AVG(amount) AS average_expense
```

```
FROM expenses
```

```
GROUP BY category;
```

✓ Showing rows 0 - 7 (8 total, Query took 0.0486 seconds.)

```
SELECT category, AVG(amount) AS average_expense FROM expenses GROUP BY category;
```

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☐ Show all | Number of rows:  Filter rows:

Extra options

				category	average_expense
<input type="checkbox"/>	Edit	Copy	Delete	Bills	75.400000
<input type="checkbox"/>	Edit	Copy	Delete	Clothing	15.990000
<input type="checkbox"/>	Edit	Copy	Delete	Dining Out	30.000000
<input type="checkbox"/>	Edit	Copy	Delete	Entertainment	28.750000
<input type="checkbox"/>	Edit	Copy	Delete	Groceries	27.875000
<input type="checkbox"/>	Edit	Copy	Delete	Other	22.000000
<input type="checkbox"/>	Edit	Copy	Delete	Transportation	5.000000
<input type="checkbox"/>	Edit	Copy	Delete	Travel	350.000000

## ## Bonus Challenge (Optional):

Are you curious about your top spending categories? Modify your query from Challenge 1 to show only the top 3 (or a chosen number) categories where you spend the most.

```
SELECT category, total_spent
```

```
FROM (
```

```
SELECT category, SUM(amount) AS total_spent
```

```
FROM expenses
```

```
GROUP BY category
```

```
) AS subquery
```

```
ORDER BY total_spent DESC
```

```
LIMIT 3;
```

Showing rows 0 - 2 (3 total, Query took 0.0006 seconds.)

```
SELECT category, total_spent FROM ( SELECT category, SUM(amount) AS total_spent FROM expenses GROUP BY category )
DESC LIMIT 3;
```

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Extra options

category	total_spent ▾ 1
Travel	350.00
Bills	75.40
Entertainment	57.50

Query results operations

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