**Challenge 1.1: Total Spent per Category**

Write a query to find the total amount spent in each category (Groceries, Entertainment, etc.).

sql

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SELECT category, SUM(amount) AS total\_spent

FROM Expenses

GROUP BY category;

Explanation:

* **SELECT category, SUM(amount) AS total\_spent**: Selects the category column and calculates the total spent (SUM(amount)) for each category. Renames the calculated column as total\_spent for clarity.
* **FROM Expenses**: Specifies the table from which to retrieve data (Expenses in this case).
* **GROUP BY category**: Groups the results by the category column, so the SUM(amount) function calculates totals per category.

**Challenge 1.2: Average Expense per Category**

Write a query to find the average expense amount for each category.

sql

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SELECT category, AVG(amount) AS average\_expense

FROM Expenses

GROUP BY category;

Explanation:

* **SELECT category, AVG(amount) AS average\_expense**: Selects the category column and calculates the average expense (AVG(amount)) for each category. Renames the calculated column as average\_expense for clarity.
* **FROM Expenses**: Specifies the table from which to retrieve data (Expenses).
* **GROUP BY category**: Groups the results by the category column to calculate averages per category.

**Bonus Challenge: Top Spending Categories**

Modify the query from Challenge 1.1 to show only the top N spending categories where N is a chosen number (e.g., top 3 categories).

sql

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SELECT category, SUM(amount) AS total\_spent

FROM Expenses

GROUP BY category

ORDER BY total\_spent DESC

LIMIT 3;

Explanation:

* **ORDER BY total\_spent DESC**: Orders the grouped results in descending order based on total\_spent, so the highest spending categories appear first.
* **LIMIT 3**: Limits the result set to the top 3 spending categories.