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Database Week 2 Assignment

SQL Queries for Expense Tracker

1.1 Retrieving All Expenses

SELECT * FROM Expenses;

1.2 Specific Columns

SELECT date, category, amount FROM Expenses;

1.3 Filtering by Date Range

SELECT * FROM Expenses WHERE date BETWEEN '2021-01-01' AND '2024-12-15';

2.1 Filtering by Category

SELECT * FROM Expenses WHERE category = 'Entertainment';

2.2 Filtering with Comparison Operators

SELECT * FROM Expenses WHERE amount > 50;

2.3 Combining Filters (AND)

SELECT * FROM Expenses WHERE amount > 75 AND category = 'Food';

2.4 Combining Filters (OR)

SELECT * FROM Expenses WHERE category = 'Transportation' OR category = 'Groceries';

2.5 Filtering with NOT

SELECT * FROM Expenses WHERE category <> 'Rent';

3.1 Sorting by Amount

SELECT * FROM Expenses ORDER BY amount DESC;

3.2 Sorting by Date and Category

SELECT * FROM Expenses ORDER BY date DESC, category ASC;

Expanding the Expense Tracker Database

4.1 Create the "Income" Table

CREATE TABLE IF NOT EXISTS Income (income_id INT PRIMARY KEY AUTO_INCREMENT, amount DECIMAL(10,2) NOT NULL, date DATE NOT NULL, source VARCHAR(50) NOT NULL);

4.2 Add a New Column "category" to the "Income" Table

ALTER TABLE Income ADD COLUMN category VARCHAR(50);

4.3 Remove the "source" Column from the "Income" Table

ALTER TABLE Income DROP COLUMN source;