PART 1.

1.1 Retrieving all Expenses

SELECT * FROM expense_tracker.Expenses;

1.2.Retrieving specific columns.
SELECT expense_id,amount,date
FROM Expenses;

1.3.Filtering by data range
SELECT *
FROM Expenses
WHERE date BETWEEN "2021-01-01" AND "2021-06-01";

PART 2. FILTERING WITH WHERE CLAUSE.

2.1 Filtering by category.
SELECT *
FROM Expenses
WHERE category= "Groceries";

2.2 Filtering by comparison operators.
SELECT *
FROM Expenses
WHERE amount >50;

2.3 Combining filters.(AND)
SELECT * FROM Expenses
WHERE amount >75 AND category ="Other";

2.4 Combining filters (OR)
SELECT * FROM Expenses
WHERE category="Transportation" OR category="Groceries"

2.5 Filtering with NOT
SELECT * FROM Expenses
WHERE category !="Groceries"

PART 3: SORTING RETRIEVED DATA

3.1Sorting by Amount
SELECT * FROM Expenses
ORDER BY amount DESC;

3.2 Sorting by Data and Category
SELECT * FROM Expenses
ORDER BY date DESC ,category ASC ;

4. DATABASE UPGRADE

4.1 Create a new table
CREATE TABLE 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 Create new column in the table
ALTER TABLE Income
ADD COLUMN category VARCHAR(50);

4.3. Remove source column
ALTER TABLE Income
DROP COLUMN source;

DROP TABLE Income;