## **Part 1:  Retrieving Data with SELECT**

**1.1 Retrieve all data points (columns) from the "Expenses" table:**

SELECT \* FROM expenses;

**1.2 Query Specific Columns:**

SELECT date, category, amount

FROM expenses;

**1.3 Filtering Date Range:**

SELECT \*

FROM expenses

WHERE date BETWEEN '2023-03-01' AND '2023-03-15';

## **Part 2: Filtering with WHERE Clause**

**2.1 Filtering by Category:**

SELECT \*

FROM expenses

WHERE category = 'friend'

**2.2 Filtering with Comparison Operators:**

SELECT \*

FROM expenses

WHERE amount >50;

**2.3 Combining Filters (AND):**

SELECT \*

FROM expenses

WHERE category ='alone' AND amount >75;

**2.4 Combining Filters (OR):**

SELECT \*

FROM expenses

WHERE category = 'groceries' OR category = 'alone';

**2.5 Filtering with NOT:**

SELECT \*

FROM expenses

WHERE category NOT LIKE '%friend%';

## **Part 3: Sorting Retrieved Data**

**3.1 Sorting by Amount:**

SELECT \*

FROM expenses

ORDER BY amount DESC;

**3.2 Sorting by Date and Category:**

SELECT \*

FROM expenses

ORDER BY category ASC, date DESC;

**Part 4: Database Upgrade**

**4.1 Write SQL commands to achieve the following:** Create a table named "Income"

CREATE TABLE Income (

income\_id INT AUTO\_INCREMENT PRIMARY KEY,

amount DECIMAL(10,2) NOT NULL,

date DATE NOT NULL,

source VARCHAR(50) NOT NULL

);

**4.2 Use ALTER TABLE to add a new column named "category" of type VARCHAR(50).**

ALTER TABLE Income

ADD COLUMN category VARCHAR(50);

**4.3 Use ALTER TABLE again to remove the "source" column from the "Income" table.**

DROP TABLE Income;