**DATABASE SQL WEEK 2 ASSIGNMENT**

**PART 1: RETRIEVING DATA WITH SELECT**

* 1. **Retrieving All Expenses:**

SELECT \* FROM expense\_tracker.expenses;

* 1. **Specific Columns: (Selecting Category)**

SELECT category

FROM expenses;

* 1. **Filtering By Date Range:**

SELECT \* FROM expenses

WHERE Date between '2022-10-07' And '2023-12-15';

**PART 2 FILTERING WITH “WHERE” CALUSE**

**2.1 Filtering by Category:**

SELECT \* FROM expenses

WHERE category Like 'entertainment'**;**

**2.2 Filtering With Comparison Operators:**

SELECT \*

FROM expenses

WHERE Amount > 50

**2.3 Filtering With Combining Filters (AND):**

SELECT \*

FROM expenses

WHERE amount >'50' AND category like 'Entertainment'

**2.4 Filtering With Combining Filters (OR):**

SELECT \*

FROM expenses

WHERE category like 'Entertainment' OR 'Groceries';

**2.5 Filtering With NOT:**

SELECT \*

FROM expenses

WHERE category NOT LIKE 'Groceries'

**PART 3 SORTING RETRIVED 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 Date DESC, category ASC

**PART 4 DATABASE UPGRADE**

**4.1 SQL commands to Create Income Table:**

CREATE TABLE IF NOT EXISTS 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 Adding New Column Using The Alter Command:**

ALTER TABLE income

ADD category VARCHAR(50);

**4.3 Dropping a Column Using Alter Table;**

ALTER TABLE income

drop category

**To Drop an Entire Table:**

DROP TABLE income**;**