SQL WEEK 2 ASSIGMENT DATABASE

AUTHOR GEOFFREY KINYANJUI

# PART1: RETRIEVING DATA WITH ‘SELECT’

1.1 Retrieving All expenses

SELECT \*

FROM expenses

1.2 Retrieving 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'

# PART 2: FILTERING WITH ‘WHERE’ CLAUSE

2.1 FILTERING BY CATEGORY

SELECT \*

FROM expenses

WHERE category='entertainment'

2.2 FILTERING WITH COMPARISION OPERATORS.

SELECT \*

FROM expenses

WHERE amount > '80'

2.3 COMBINING FILTERS (AND)

SELECT \*

FROM expenses

WHERE category='entertainment' AND amount > 80

2.4 COMBING FILTER OR

SELECT \*

FROM expenses

WHERE category='other' OR category='Transportation'

2.5 FILTERING WITH NOT.

SELECT \*

FROM expenses

WHERE NOT amount <= 90

# PART3: SORTING RETRIEVED DATA.

3.1 SORTING BY AMOUNT.

SELECT \*

FROM expenses

WHERE amount >= '50'

ORDER BY amount DESC

3.2 SORTING BY DATE AND CATEGORY

SELECT

date,

category

FROM expenses

ORDER BY date DESC, category ASC

# PART4: DATABASE UPGRADE.

4.1 CREATING AN INCOME TABLE.

CREATE TABLE Income(

income\_id INT NOT NULL

AUTO\_INCREMENT PRIMARY key,

amount DECIMAL(10,2) NOT NULL,

date DATE NOT NULL,

source VARCHAR(50) NOT NULL

)

4.2 ADDING A SOURCE COLUMN.

ALTER TABLE income

ADD category VARCHAR(50) NOT NULL

4.3 DROPPING THE SOURCE COLUMN

ALTER TABLE income

DROP COLUMN source