

# Database Week 2 Assignment

## Part 1 Retrieving Data with SELECT

Question 1.1

```
SELECT * FROM expenses;
```

Question 1.2

```
SELECT category FROM expenses;  
SELECT category , amount FROM expenses;
```

Question 1.3

```
SELECT * FROM expenses  
WHERE date >= '2021-01-01' AND date <= '2024-12-15';
```

## Part 2 : Filtering with WHERE Clause

**Question 2.1**

```
SELECT * FROM expenses  
WHERE Category = 'Entertainment';  
There is no category called Entertainment
```

**Question 2.2**

This command returns the column item and Amount and filters columns with amount > 50

```
SELECT Item , Amount  
FROM expenses  
WHERE Amount > 50;
```

```
SELECT *  
FROM expenses  
WHERE Amount > 50
```

# Database Week 2 Assignment

## Question 2.3

There is not category called Food so i used the category name 'Alone'

```
SELECT *  
FROM expenses  
WHERE Category = 'Alone' AND Amount > 75 ;
```

```
SELECT item ,amount  
FROM expense  
WHERE Category = "Food" AND amount > 75;
```

## Question 2.4

```
SELECT *  
FROM expenses  
WHERE Category = 'Alone' OR Category = 'Friend';
```

## Question 2.5

```
SELECT *  
FROM expenses  
WHERE NOT (Category = 'Alone');
```

```
SELECT *  
FROM expenses  
WHERE Category != "Alone" ;
```

```
SELECT *  
FROM expense  
WHERE Category <> "Friend"
```

# Database Week 2 Assignment

## Part 3: Sorting Retrieved Data

### Question 3.1

```
SELECT *  
FROM expenses  
order by Amount desc;  
Question 3.2
```

```
SELECT *  
FROM expenses  
ORDER BY date DESC , Category ASC ;
```

## Part 4: Database Upgrade

### Question 4.1

```
CREATE TABLE Income(  
income_id INT PRIMARY KEY auto_increment,  
Amout DECIMAL(10,2) NOT NULL,  
date_Created DATE NOT NULL,  
Sourced VARCHAR(50) NOT NULL  
);
```

\*the Income table was created in a different database ,so i specified the database.

```
CREATE TABLE expense_tracker.Income(  
income_id INT PRIMARY KEY auto_increment,  
Amout DECIMAL(10,2) NOT NULL,  
date_Created DATE NOT NULL,  
Sourced VARCHAR(50) NOT NULL  
);
```

### Question 4.2

```
ALTER TABLE Income  
ADD Category VARCHAR(50);
```

# Database Week 2 Assignment

## Question 4.3

```
ALTER TABLE income  
DROP COLUMN Sourced;
```

## Question 4.4

```
DROP TABLE income;
```