Assignment: Personal Finance Tracker

Objective:

Create a Personal Finance Tracker application using Python that interacts with a MySQL database. This project will help you understand how to manage data using a database, organize your code into modules, and perform CRUD operations.

Requirements:

1. **Database Module**: Handle the connection to the MySQL database and basic CRUD operations.

2. **Transaction Module**: Manage income and expense transactions.

3. **Report Module**: Generate financial reports.

Instructions:

1. **Set Up Your Environment**:

    o   Install MySQL and create a database named finance_tracker.

    o   Install the mysql-connector-python package using pip

2. **Database Module (database.py):**

    o   Create a class DatabaseConnection to manage the connection to the MySQL database.

    o   Create a class CRUDOperations to provide methods for Create, Read, Update, and Delete operations.

3. **Transaction Module (transaction.py):**

    o   Create a class Transaction to represent a transaction entity.

    o   Create a class TransactionManager to provide methods to manage transactions.

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Deliverables:

1. **Code Files**: Submit the database.py, transaction.py, report.py, and main.py files.

2. **Database Schema**: Provide the SQL script used to create the transactions table in the finance_tracker database.

3. **Documentation**: Include a README file explaining how to set up and run the application.

Evaluation Criteria:

- Correctness: The application should meet all the specified requirements.

- Code Quality: The code should be well-organized, properly commented, and follow Python coding conventions.

- Functionality: The application should be functional and handle basic CRUD operations and report generation