# Portfolio Management & Analysis Using SQL

Done By: Divakaran S

# **Project Documentation**

# 1. Project Overview

This project analyzes personal investment data using SQL. The dataset includes details about brokers, assets, and transactions. The goal is to derive insights such as total investment, top assets, and monthly trends using SQL queries.

# 2. Tools & Technologies Used

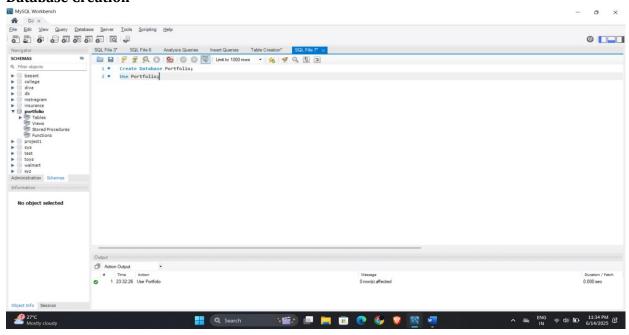
- MySQL
- SQL Workbench

#### 3. Dataset Structure

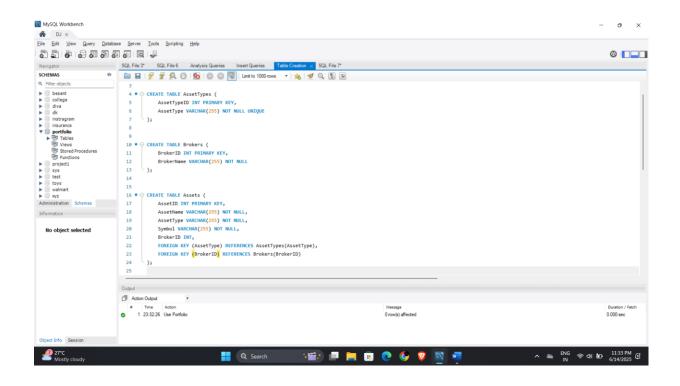
| Table Name             | Description                                |
|------------------------|--|
| Brokers                | Contains BrokerID and BrokerName.          |
| Assets                 | Contains AssetID, AssetName, and           |
|                        | AssetType.                                 |
| InvestmentTransactions | Contains TransactionID, AssetID, BrokerID, |
|                        | Date, Quantity, and TotalValue.            |
| AssetType              | AssetType, AssetId                         |
| Date                   | Date, Month, Year, Quarter                 |
| MarketPrices           | Date, AssetId, MarketPrice                 |

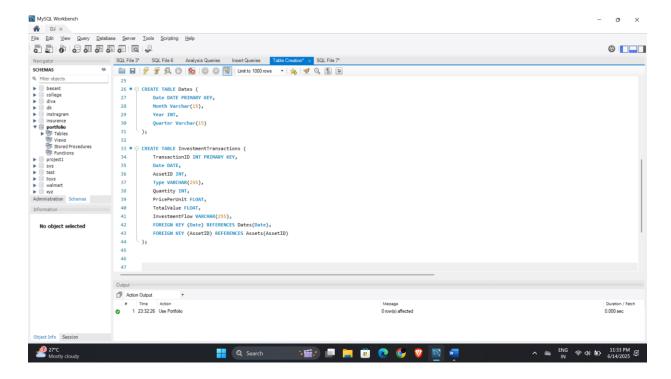
#### 4. Database Schema

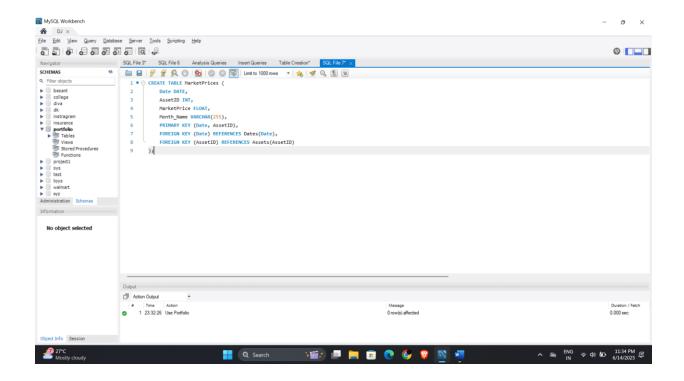
#### 1. Database Creation



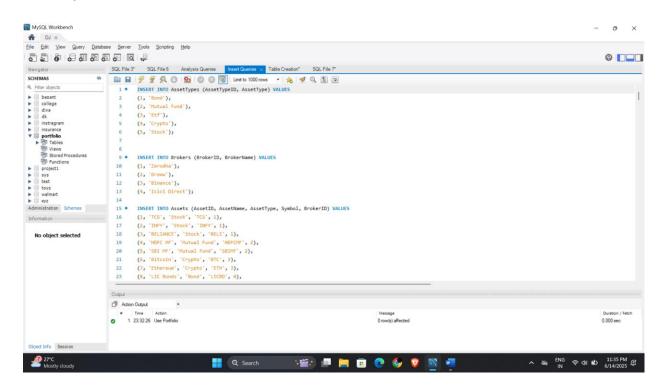
#### 2. Table Creation

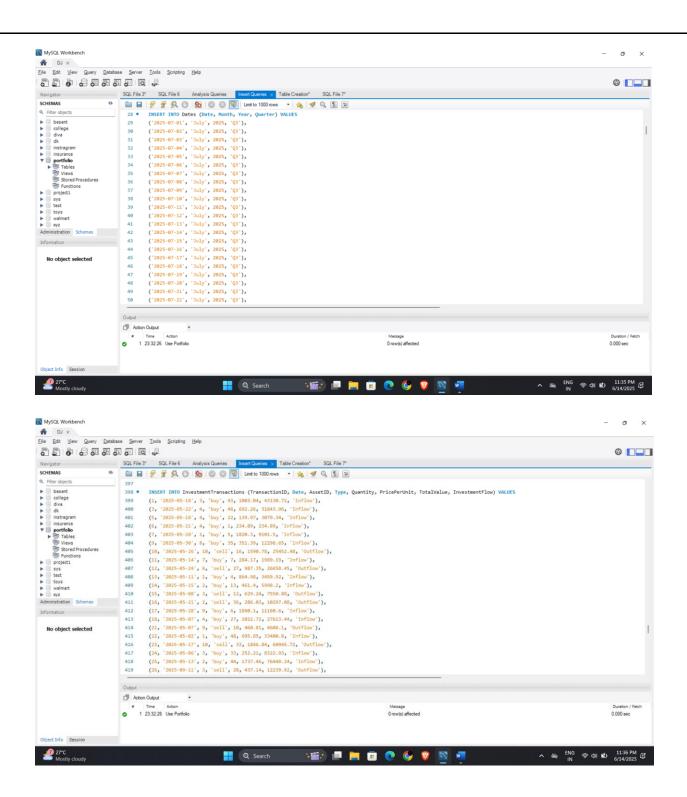


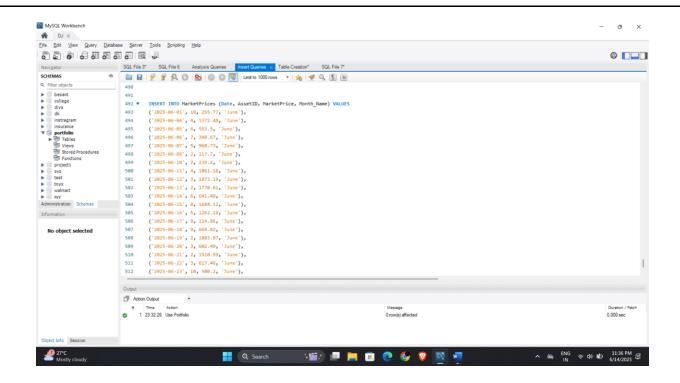




#### 3. Insert Queries

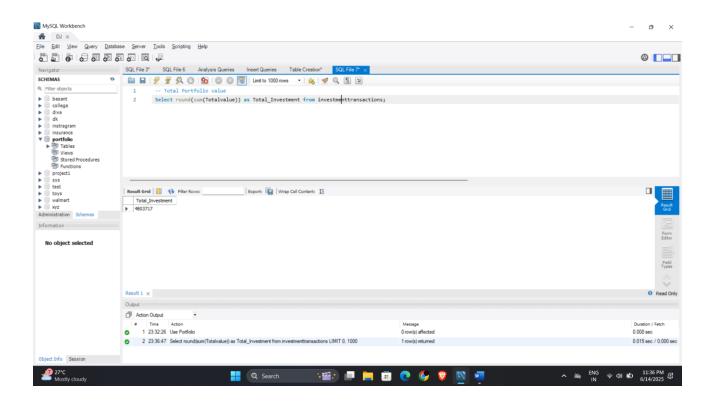




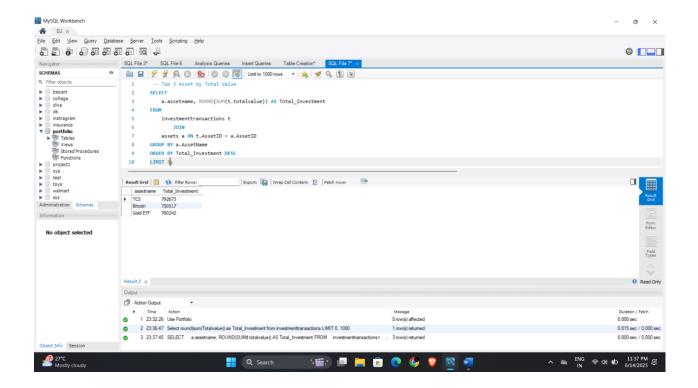


# 5. SQL Queries & Insights

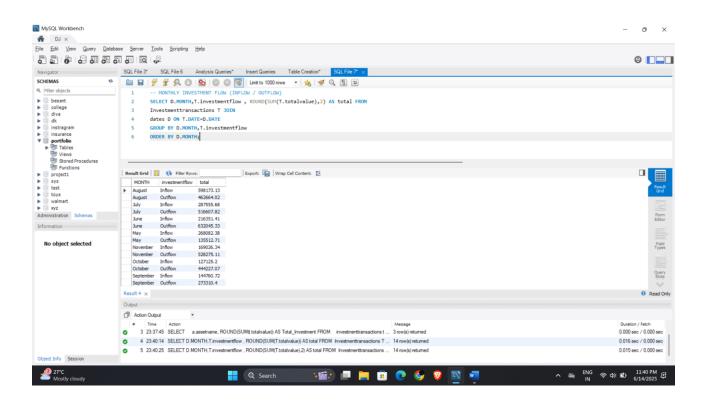
1. Total Investment has been Made



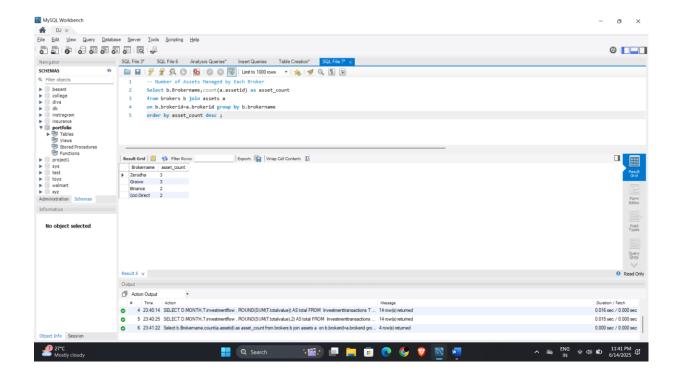
#### 2. Top 3 Assets by Total Value



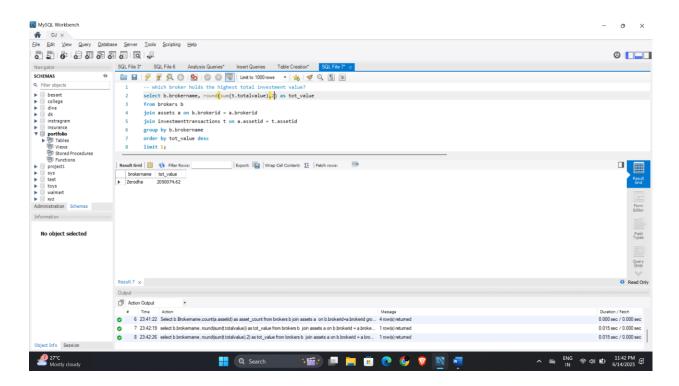
# 3. Monthly Investment Flow (Inflow / Outflow)



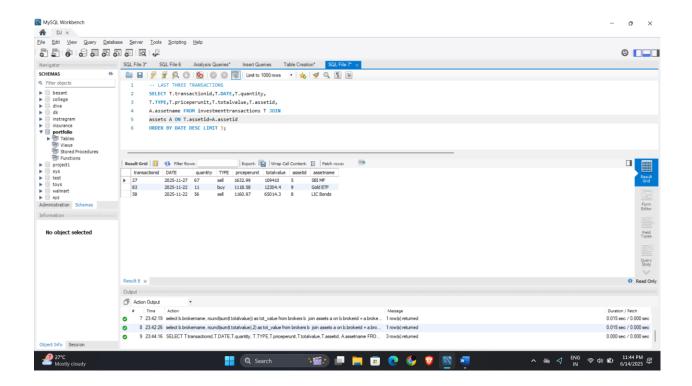
#### 4. Number of Assets Managed by Each Broker



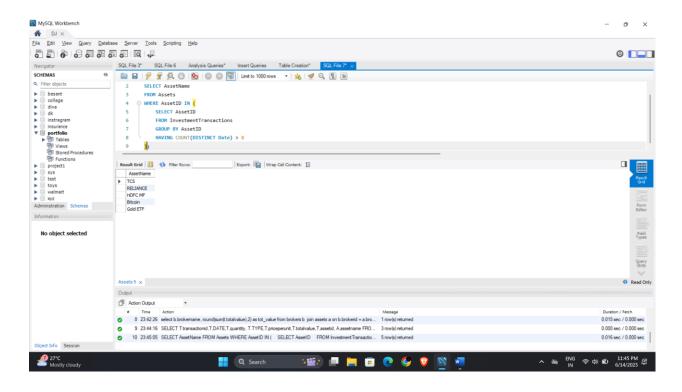
## 5. Which broker holds the highest total investment value?



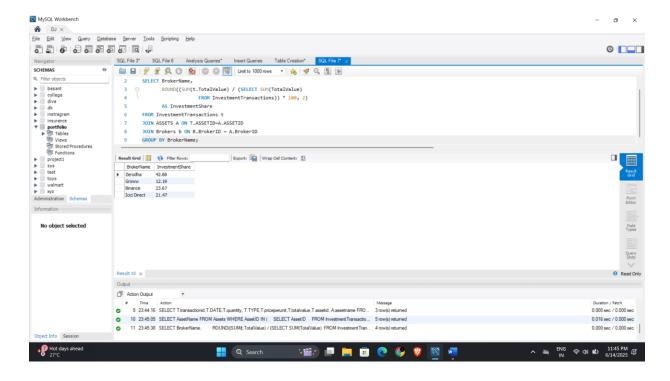
#### 6. Last Three Transactions



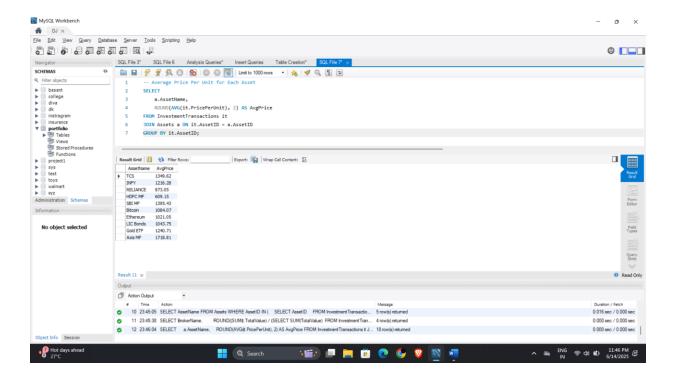
# 7. Same Assets Invested on More Than 8 Days



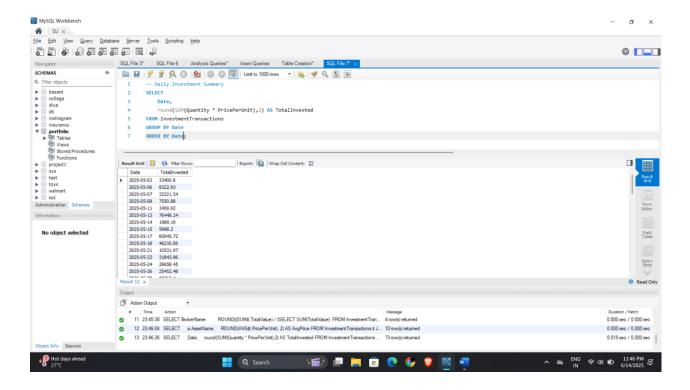
# 8. Percentage of Investment Per Broker



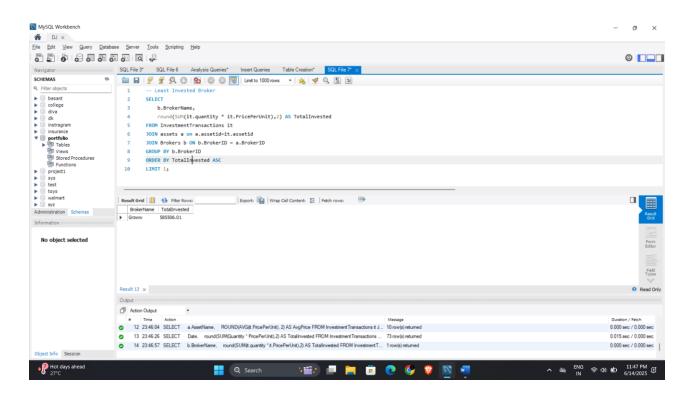
# 9. Average Price Per Unit for Each Asset



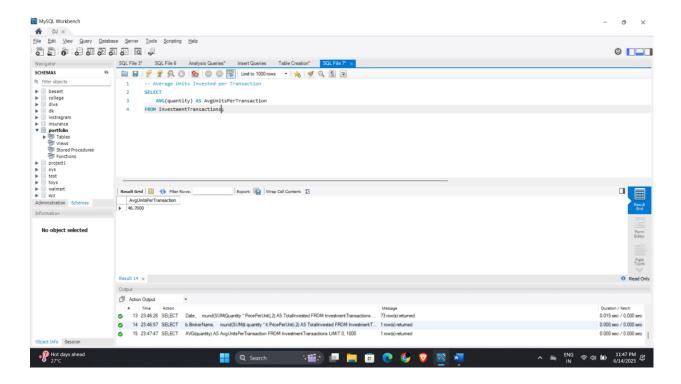
### 10. Daily Investment Summary



#### 11. Least Invested Broker



# 12. Average Units Invested per Transaction



#### 7. Conclusion

This SQL project demonstrates how structured financial data can be modeled, queried, and analyzed to extract meaningful insights. It highlights skills in schema design, and writing efficient SQL queries.

# 8. Appendix

#### 1. Table Creation

```
Create Database Portfolio;
Use Portfolio;
CREATE TABLE AssetTypes (
 AssetTypeID INT PRIMARY KEY,
 AssetType VARCHAR(255) NOT NULL UNIQUE
);
CREATE TABLE Brokers (
 BrokerID INT PRIMARY KEY,
 BrokerName VARCHAR(255) NOT NULL
);
CREATE TABLE Assets (
 AssetID INT PRIMARY KEY,
 AssetName VARCHAR(255) NOT NULL,
 AssetType VARCHAR(255) NOT NULL,
 Symbol VARCHAR(255) NOT NULL,
 BrokerID INT,
 FOREIGN KEY (AssetType) REFERENCES AssetTypes(AssetType),
 FOREIGN KEY (BrokerID) REFERENCES Brokers(BrokerID)
);
CREATE TABLE Dates (
 Date DATE PRIMARY KEY,
 Month Varchar(15),
 Year INT,
 Quarter Varchar(15)
);
CREATE TABLE InvestmentTransactions (
 TransactionID INT PRIMARY KEY,
 Date DATE,
 AssetID INT,
 Type VARCHAR(255),
 Quantity INT,
 PricePerUnit FLOAT,
```

```
TotalValue FLOAT,
     InvestmentFlow VARCHAR(255),
     FOREIGN KEY (Date) REFERENCES Dates (Date),
     FOREIGN KEY (AssetID) REFERENCES Assets(AssetID)
   );
   CREATE TABLE MarketPrices (
     Date DATE,
     AssetID INT,
     MarketPrice FLOAT,
     Month Name VARCHAR(255),
     PRIMARY KEY (Date, AssetID),
     FOREIGN KEY (Date) REFERENCES Dates(Date),
     FOREIGN KEY (AssetID) REFERENCES Assets(AssetID)
   );
2. Insert Queries
   INSERT INTO AssetTypes (AssetTypeID, AssetType) VALUES
   (1, 'Bond'),
   (2, 'Mutual Fund'),
   (3, 'Etf'),
   (4, 'Crypto'),
   (5, 'Stock');
   INSERT INTO Brokers (BrokerID, BrokerName) VALUES
   (1, 'Zerodha'),
   (2, 'Groww'),
   (3, 'Binance'),
   (4, 'Icici Direct');
   INSERT INTO Assets (AssetID, AssetName, AssetType, Symbol, BrokerID) VALUES
   (1, 'TCS', 'Stock', 'TCS', 1),
   (2, 'INFY', 'Stock', 'INFY', 1),
   (3, 'RELIANCE', 'Stock', 'RELI', 1),
   (4, 'HDFC MF', 'Mutual Fund', 'HDFCMF', 2),
   (5, 'SBI MF', 'Mutual Fund', 'SBIMF', 2),
   (6, 'Bitcoin', 'Crypto', 'BTC', 3),
   (7, 'Ethereum', 'Crypto', 'ETH', 3),
   (8, 'LIC Bonds', 'Bond', 'LICBD', 4),
```

(9, 'Gold ETF', 'Etf', 'GOLDETF', 4),

(10, 'Axis MF', 'Mutual Fund', 'AXISMF', 2);

```
INSERT INTO Dates (Date, Month, Year, Quarter) VALUES
('2025-07-01', 'July', 2025, 'Q3'),
('2025-07-02', 'July', 2025, 'Q3'),
('2025-07-03', 'July', 2025, 'Q3'),
('2025-07-04', 'July', 2025, 'Q3'),
('2025-07-05', 'July', 2025, 'Q3'),
('2025-07-06', 'July', 2025, 'Q3'),
('2025-07-07', 'July', 2025, 'Q3'),
('2025-07-08', 'July', 2025, 'Q3'),
('2025-07-09', 'July', 2025, 'Q3'),
('2025-07-10', 'July', 2025, 'Q3'),
('2025-07-11', 'July', 2025, 'Q3'),
('2025-07-12', 'July', 2025, 'Q3'),
('2025-07-13', 'July', 2025, 'Q3'),
('2025-07-14', 'July', 2025, 'Q3'),
('2025-07-15', 'July', 2025, 'Q3'),
('2025-07-16', 'July', 2025, 'Q3'),
('2025-07-17', 'July', 2025, 'Q3'),
('2025-07-18', 'July', 2025, 'Q3'),
('2025-07-19', 'July', 2025, 'Q3'),
('2025-07-20', 'July', 2025, 'Q3'),
('2025-07-21', 'July', 2025, 'Q3'),
('2025-07-22', 'July', 2025, 'Q3'),
('2025-07-23', 'July', 2025, 'Q3'),
('2025-07-24', 'July', 2025, 'Q3'),
('2025-07-25', 'July', 2025, 'Q3'),
('2025-07-26', 'July', 2025, 'Q3'),
('2025-07-27', 'July', 2025, 'Q3'),
('2025-07-28', 'July', 2025, 'Q3'),
('2025-07-29', 'July', 2025, 'Q3'),
('2025-07-30', 'July', 2025, 'Q3'),
('2025-07-31', 'July', 2025, 'Q3'),
('2025-08-01', 'August', 2025, 'Q3'),
('2025-08-02', 'August', 2025, 'Q3'),
('2025-08-03', 'August', 2025, 'Q3'),
('2025-08-04', 'August', 2025, 'Q3'),
('2025-08-05', 'August', 2025, 'Q3'),
('2025-08-06', 'August', 2025, 'Q3'),
('2025-08-07', 'August', 2025, 'Q3'),
('2025-08-08', 'August', 2025, 'Q3'),
('2025-08-09', 'August', 2025, 'Q3'),
('2025-08-10', 'August', 2025, 'Q3'),
```

```
('2025-08-11', 'August', 2025, 'Q3'),
('2025-08-12', 'August', 2025, 'Q3'),
('2025-08-13', 'August', 2025, 'Q3'),
('2025-08-14', 'August', 2025, 'Q3'),
('2025-08-15', 'August', 2025, 'Q3'),
('2025-08-16', 'August', 2025, 'Q3'),
('2025-08-17', 'August', 2025, 'Q3'),
('2025-08-18', 'August', 2025, 'Q3'),
('2025-08-19', 'August', 2025, 'Q3'),
('2025-08-20', 'August', 2025, 'Q3'),
('2025-08-21', 'August', 2025, 'Q3'),
('2025-08-22', 'August', 2025, 'Q3'),
('2025-08-23', 'August', 2025, 'Q3'),
('2025-08-24', 'August', 2025, 'Q3'),
('2025-08-25', 'August', 2025, 'Q3'),
('2025-08-26', 'August', 2025, 'Q3'),
('2025-08-27', 'August', 2025, 'Q3'),
('2025-08-28', 'August', 2025, 'Q3'),
('2025-08-29', 'August', 2025, 'Q3'),
('2025-08-30', 'August', 2025, 'Q3'),
('2025-08-31', 'August', 2025, 'Q3'),
('2025-09-01', 'September', 2025, 'Q3'),
('2025-09-02', 'September', 2025, 'Q3'),
('2025-09-03', 'September', 2025, 'Q3'),
('2025-09-04', 'September', 2025, 'Q3'),
('2025-09-05', 'September', 2025, 'Q3'),
('2025-09-06', 'September', 2025, 'Q3'),
('2025-09-07', 'September', 2025, 'Q3'),
('2025-09-08', 'September', 2025, 'Q3'),
('2025-09-09', 'September', 2025, 'Q3'),
('2025-09-10', 'September', 2025, 'Q3'),
('2025-09-11', 'September', 2025, 'Q3'),
('2025-09-12', 'September', 2025, 'Q3'),
('2025-09-13', 'September', 2025, 'Q3'),
('2025-09-14', 'September', 2025, 'Q3'),
('2025-09-15', 'September', 2025, 'Q3'),
('2025-09-16', 'September', 2025, 'Q3'),
('2025-09-17', 'September', 2025, 'Q3'),
('2025-09-18', 'September', 2025, 'Q3'),
('2025-09-19', 'September', 2025, 'Q3'),
('2025-09-20', 'September', 2025, 'Q3'),
('2025-09-21', 'September', 2025, 'Q3'),
('2025-09-22', 'September', 2025, 'Q3'),
('2025-09-23', 'September', 2025, 'Q3'),
```

```
('2025-09-24', 'September', 2025, 'Q3'),
('2025-09-25', 'September', 2025, 'Q3'),
('2025-09-26', 'September', 2025, 'Q3'),
('2025-09-27', 'September', 2025, 'Q3'),
('2025-09-28', 'September', 2025, 'Q3'),
('2025-09-29', 'September', 2025, 'Q3'),
('2025-09-30', 'September', 2025, 'Q3'),
('2025-04-01', 'April', 2025, 'Q2'),
('2025-04-02', 'April', 2025, 'Q2'),
('2025-04-03', 'April', 2025, 'Q2'),
('2025-04-04', 'April', 2025, 'Q2'),
('2025-04-05', 'April', 2025, 'Q2'),
('2025-04-06', 'April', 2025, 'Q2'),
('2025-04-07', 'April', 2025, 'Q2'),
('2025-04-08', 'April', 2025, 'Q2'),
('2025-04-09', 'April', 2025, 'Q2'),
('2025-04-10', 'April', 2025, 'Q2'),
('2025-04-11', 'April', 2025, 'Q2'),
('2025-04-12', 'April', 2025, 'Q2'),
('2025-04-13', 'April', 2025, 'Q2'),
('2025-04-14', 'April', 2025, 'Q2'),
('2025-04-15', 'April', 2025, 'Q2'),
('2025-04-16', 'April', 2025, 'Q2'),
('2025-04-17', 'April', 2025, 'Q2'),
('2025-04-18', 'April', 2025, 'Q2'),
('2025-04-19', 'April', 2025, 'Q2'),
('2025-04-20', 'April', 2025, 'Q2'),
('2025-04-21', 'April', 2025, 'Q2'),
('2025-04-22', 'April', 2025, 'Q2'),
('2025-04-23', 'April', 2025, 'Q2'),
('2025-04-24', 'April', 2025, 'Q2'),
('2025-04-25', 'April', 2025, 'Q2'),
('2025-04-26', 'April', 2025, 'Q2'),
('2025-04-27', 'April', 2025, 'Q2'),
('2025-04-28', 'April', 2025, 'Q2'),
('2025-04-29', 'April', 2025, 'Q2'),
('2025-04-30', 'April', 2025, 'Q2'),
('2025-05-01', 'May', 2025, 'Q2'),
('2025-05-02', 'May', 2025, 'Q2'),
('2025-05-03', 'May', 2025, 'Q2'),
('2025-05-04', 'May', 2025, 'Q2'),
('2025-05-05', 'May', 2025, 'Q2'),
('2025-05-06', 'May', 2025, 'Q2'),
('2025-05-07', 'May', 2025, 'Q2'),
```

```
('2025-05-08', 'May', 2025, 'Q2'),
('2025-05-09', 'May', 2025, 'Q2'),
('2025-05-10', 'May', 2025, 'Q2'),
('2025-05-11', 'May', 2025, 'Q2'),
('2025-05-12', 'May', 2025, 'Q2'),
('2025-05-13', 'May', 2025, 'Q2'),
('2025-05-14', 'May', 2025, 'Q2'),
('2025-05-15', 'May', 2025, 'Q2'),
('2025-05-16', 'May', 2025, 'Q2'),
('2025-05-17', 'May', 2025, 'Q2'),
('2025-05-18', 'May', 2025, 'Q2'),
('2025-05-19', 'May', 2025, 'Q2'),
('2025-05-20', 'May', 2025, 'Q2'),
('2025-05-21', 'May', 2025, 'Q2'),
('2025-05-22', 'May', 2025, 'Q2'),
('2025-05-23', 'May', 2025, 'Q2'),
('2025-05-24', 'May', 2025, 'Q2'),
('2025-05-25', 'May', 2025, 'Q2'),
('2025-05-26', 'May', 2025, 'Q2'),
('2025-05-27', 'May', 2025, 'Q2'),
('2025-05-28', 'May', 2025, 'Q2'),
('2025-05-29', 'May', 2025, 'Q2'),
('2025-05-30', 'May', 2025, 'Q2'),
('2025-05-31', 'May', 2025, 'Q2'),
('2025-06-01', 'June', 2025, 'Q2'),
('2025-06-02', 'June', 2025, 'Q2'),
('2025-06-03', 'June', 2025, 'Q2'),
('2025-06-04', 'June', 2025, 'Q2'),
('2025-06-05', 'June', 2025, 'Q2'),
('2025-06-06', 'June', 2025, 'Q2'),
('2025-06-07', 'June', 2025, 'Q2'),
('2025-06-08', 'June', 2025, 'Q2'),
('2025-06-09', 'June', 2025, 'Q2'),
('2025-06-10', 'June', 2025, 'Q2'),
('2025-06-11', 'June', 2025, 'Q2'),
('2025-06-12', 'June', 2025, 'Q2'),
('2025-06-13', 'June', 2025, 'Q2'),
('2025-06-14', 'June', 2025, 'Q2'),
('2025-06-15', 'June', 2025, 'Q2'),
('2025-06-16', 'June', 2025, 'Q2'),
('2025-06-17', 'June', 2025, 'Q2'),
('2025-06-18', 'June', 2025, 'Q2'),
('2025-06-19', 'June', 2025, 'Q2'),
('2025-06-20', 'June', 2025, 'Q2'),
```

```
('2025-06-21', 'June', 2025, 'Q2'),
('2025-06-22', 'June', 2025, 'Q2'),
('2025-06-23', 'June', 2025, 'Q2'),
('2025-06-24', 'June', 2025, 'Q2'),
('2025-06-25', 'June', 2025, 'Q2'),
('2025-06-26', 'June', 2025, 'Q2'),
('2025-06-27', 'June', 2025, 'Q2'),
('2025-06-28', 'June', 2025, 'Q2'),
('2025-06-29', 'June', 2025, 'Q2'),
('2025-06-30', 'June', 2025, 'Q2'),
('2025-10-01', 'October', 2025, 'Q4'),
('2025-10-02', 'October', 2025, 'Q4'),
('2025-10-03', 'October', 2025, 'Q4'),
('2025-10-04', 'October', 2025, 'Q4'),
('2025-10-05', 'October', 2025, 'Q4'),
('2025-10-06', 'October', 2025, 'Q4'),
('2025-10-07', 'October', 2025, 'Q4'),
('2025-10-08', 'October', 2025, 'Q4'),
('2025-10-09', 'October', 2025, 'Q4'),
('2025-10-10', 'October', 2025, 'Q4'),
('2025-10-11', 'October', 2025, 'Q4'),
('2025-10-12', 'October', 2025, 'Q4'),
('2025-10-13', 'October', 2025, 'Q4'),
('2025-10-14', 'October', 2025, 'Q4'),
('2025-10-15', 'October', 2025, 'Q4'),
('2025-10-16', 'October', 2025, 'Q4'),
('2025-10-17', 'October', 2025, 'Q4'),
('2025-10-18', 'October', 2025, 'Q4'),
('2025-10-19', 'October', 2025, 'Q4'),
('2025-10-20', 'October', 2025, 'Q4'),
('2025-10-21', 'October', 2025, '04'),
('2025-10-22', 'October', 2025, 'Q4'),
('2025-10-23', 'October', 2025, 'Q4'),
('2025-10-24', 'October', 2025, 'Q4'),
('2025-10-25', 'October', 2025, 'Q4'),
('2025-10-26', 'October', 2025, 'Q4'),
('2025-10-27', 'October', 2025, 'Q4'),
('2025-10-28', 'October', 2025, 'Q4'),
('2025-10-29', 'October', 2025, 'Q4'),
('2025-10-30', 'October', 2025, 'Q4'),
('2025-10-31', 'October', 2025, 'Q4'),
('2025-11-01', 'November', 2025, 'Q4'),
('2025-11-02', 'November', 2025, 'Q4'),
('2025-11-03', 'November', 2025, 'Q4'),
```

```
('2025-11-04', 'November', 2025, 'Q4'),
('2025-11-05', 'November', 2025, 'Q4'),
('2025-11-06', 'November', 2025, 'Q4'),
('2025-11-07', 'November', 2025, 'Q4'),
('2025-11-08', 'November', 2025, 'Q4'),
('2025-11-09', 'November', 2025, 'Q4'),
('2025-11-10', 'November', 2025, 'Q4'),
('2025-11-11', 'November', 2025, 'Q4'),
('2025-11-12', 'November', 2025, 'Q4'),
('2025-11-13', 'November', 2025, 'Q4'),
('2025-11-14', 'November', 2025, 'Q4'),
('2025-11-15', 'November', 2025, 'Q4'),
('2025-11-16', 'November', 2025, 'Q4'),
('2025-11-17', 'November', 2025, 'Q4'),
('2025-11-18', 'November', 2025, '04'),
('2025-11-19', 'November', 2025, 'Q4'),
('2025-11-20', 'November', 2025, 'Q4'),
('2025-11-21', 'November', 2025, 'Q4'),
('2025-11-22', 'November', 2025, 'Q4'),
('2025-11-23', 'November', 2025, 'Q4'),
('2025-11-24', 'November', 2025, 'Q4'),
('2025-11-25', 'November', 2025, 'Q4'),
('2025-11-26', 'November', 2025, 'Q4'),
('2025-11-27', 'November', 2025, 'Q4'),
('2025-11-28', 'November', 2025, 'Q4'),
('2025-11-29', 'November', 2025, 'Q4'),
('2025-11-30', 'November', 2025, 'Q4'),
('2025-12-01', 'December', 2025, 'Q4'),
('2025-12-02', 'December', 2025, 'Q4'),
('2025-12-03', 'December', 2025, 'Q4'),
('2025-12-04', 'December', 2025, '04').
('2025-12-05', 'December', 2025, 'Q4'),
('2025-12-06', 'December', 2025, 'Q4'),
('2025-12-07', 'December', 2025, 'Q4'),
('2025-12-08', 'December', 2025, 'Q4'),
('2025-12-09', 'December', 2025, 'Q4'),
('2025-12-10', 'December', 2025, 'Q4'),
('2025-12-11', 'December', 2025, 'Q4'),
('2025-12-12', 'December', 2025, 'Q4'),
('2025-12-13', 'December', 2025, 'Q4'),
('2025-12-14', 'December', 2025, 'Q4'),
('2025-12-15', 'December', 2025, 'Q4'),
('2025-12-16', 'December', 2025, 'Q4'),
('2025-12-17', 'December', 2025, 'Q4'),
```

```
('2025-12-18', 'December', 2025, 'Q4'),
('2025-12-19', 'December', 2025, 'Q4'),
('2025-12-20', 'December', 2025, 'Q4'),
('2025-12-21', 'December', 2025, 'Q4'),
('2025-12-22', 'December', 2025, 'Q4'),
('2025-12-23', 'December', 2025, 'Q4'),
('2025-12-24', 'December', 2025, 'Q4'),
('2025-12-25', 'December', 2025, 'Q4'),
('2025-12-26', 'December', 2025, 'Q4'),
('2025-12-27', 'December', 2025, 'Q4'),
('2025-12-28', 'December', 2025, 'Q4'),
('2025-12-29', 'December', 2025, '04').
('2025-12-30', 'December', 2025, 'Q4'),
('2025-12-31', 'December', 2025, 'Q4'),
('2025-01-01', 'January', 2025, 'Q1'),
('2025-01-02', 'January', 2025, 'Q1'),
('2025-01-03', 'January', 2025, 'Q1'),
('2025-01-04', 'January', 2025, 'Q1'),
('2025-01-05', 'January', 2025, 'Q1'),
('2025-01-06', 'January', 2025, 'Q1'),
('2025-01-07', 'January', 2025, 'Q1'),
('2025-01-08', 'January', 2025, 'Q1'),
('2025-01-09', 'January', 2025, 'Q1'),
('2025-01-10', 'January', 2025, 'Q1'),
('2025-01-11', 'January', 2025, 'Q1'),
('2025-01-12', 'January', 2025, 'Q1'),
('2025-01-13', 'January', 2025, 'Q1'),
('2025-01-14', 'January', 2025, 'Q1'),
('2025-01-15', 'January', 2025, 'Q1'),
('2025-01-16', 'January', 2025, 'Q1'),
('2025-01-17', 'January', 2025, 'Q1'),
('2025-01-18', 'January', 2025, 'Q1'),
('2025-01-19', 'January', 2025, 'Q1'),
('2025-01-20', 'January', 2025, 'Q1'),
('2025-01-21', 'January', 2025, 'Q1'),
('2025-01-22', 'January', 2025, 'Q1'),
('2025-01-23', 'January', 2025, 'Q1'),
('2025-01-24', 'January', 2025, 'Q1'),
('2025-01-25', 'January', 2025, 'Q1'),
('2025-01-26', 'January', 2025, 'Q1'),
('2025-01-27', 'January', 2025, 'Q1'),
('2025-01-28', 'January', 2025, 'Q1'),
('2025-01-29', 'January', 2025, 'Q1'),
('2025-01-30', 'January', 2025, 'Q1'),
```

```
('2025-01-31', 'January', 2025, 'Q1'),
('2025-02-01', 'February', 2025, 'Q1'),
('2025-02-02', 'February', 2025, 'Q1'),
('2025-02-03', 'February', 2025, 'Q1'),
('2025-02-04', 'February', 2025, 'Q1'),
('2025-02-05', 'February', 2025, 'Q1'),
('2025-02-06', 'February', 2025, 'Q1'),
('2025-02-07', 'February', 2025, 'Q1'),
('2025-02-08', 'February', 2025, 'Q1'),
('2025-02-09', 'February', 2025, 'Q1'),
('2025-02-10', 'February', 2025, 'Q1'),
('2025-02-11', 'February', 2025, 'Q1'),
('2025-02-12', 'February', 2025, 'Q1'),
('2025-02-13', 'February', 2025, 'Q1'),
('2025-02-14', 'February', 2025, 'Q1'),
('2025-02-15', 'February', 2025, 'Q1'),
('2025-02-16', 'February', 2025, 'Q1'),
('2025-02-17', 'February', 2025, 'Q1'),
('2025-02-18', 'February', 2025, 'Q1'),
('2025-02-19', 'February', 2025, 'Q1'),
('2025-02-20', 'February', 2025, 'Q1'),
('2025-02-21', 'February', 2025, 'Q1'),
('2025-02-22', 'February', 2025, 'Q1'),
('2025-02-23', 'February', 2025, 'Q1'),
('2025-02-24', 'February', 2025, 'Q1'),
('2025-02-25', 'February', 2025, 'Q1'),
('2025-02-26', 'February', 2025, 'Q1'),
('2025-02-27', 'February', 2025, 'Q1'),
('2025-02-28', 'February', 2025, 'Q1'),
('2025-03-01', 'March', 2025, 'Q1'),
('2025-03-02', 'March', 2025, '01'),
('2025-03-03', 'March', 2025, 'Q1'),
('2025-03-04', 'March', 2025, 'Q1'),
('2025-03-05', 'March', 2025, 'Q1'),
('2025-03-06', 'March', 2025, 'Q1'),
('2025-03-07', 'March', 2025, 'Q1'),
('2025-03-08', 'March', 2025, 'Q1'),
('2025-03-09', 'March', 2025, 'Q1'),
('2025-03-10', 'March', 2025, 'Q1'),
('2025-03-11', 'March', 2025, 'Q1'),
('2025-03-12', 'March', 2025, 'Q1'),
('2025-03-13', 'March', 2025, 'Q1'),
('2025-03-14', 'March', 2025, 'Q1'),
('2025-03-15', 'March', 2025, 'Q1'),
```

```
('2025-03-16', 'March', 2025, 'Q1'),
('2025-03-17', 'March', 2025, 'Q1'),
('2025-03-18', 'March', 2025, 'Q1'),
('2025-03-19', 'March', 2025, 'Q1'),
('2025-03-20', 'March', 2025, 'Q1'),
('2025-03-21', 'March', 2025, 'Q1'),
('2025-03-22', 'March', 2025, 'Q1'),
('2025-03-23', 'March', 2025, 'Q1'),
('2025-03-24', 'March', 2025, 'Q1'),
('2025-03-25', 'March', 2025, 'Q1'),
('2025-03-26', 'March', 2025, 'Q1'),
('2025-03-27', 'March', 2025, 'Q1'),
('2025-03-28', 'March', 2025, 'Q1'),
('2025-03-29', 'March', 2025, 'Q1'),
('2025-03-30', 'March', 2025, 'Q1'),
('2025-03-31', 'March', 2025, 'Q1');
INSERT INTO InvestmentTransactions (TransactionID, Date, AssetID, Type, Quantity,
PricePerUnit, TotalValue, InvestmentFlow) VALUES
(1, '2025-05-18', 3, 'buy', 43, 1003.04, 43130.72, 'Inflow'),
(3, '2025-05-22', 4, 'buy', 46, 692.26, 31843.96, 'Inflow'),
(5, '2025-05-18', 4, 'buy', 22, 139.97, 3079.34, 'Inflow'),
(6, '2025-05-21', 4, 'buy', 1, 234.89, 234.89, 'Inflow'),
(7, '2025-05-28', 1, 'buy', 5, 1820.3, 9101.5, 'Inflow'),
(9, '2025-05-30', 8, 'buy', 35, 351.39, 12298.65, 'Inflow'),
(10, '2025-05-26', 10, 'sell', 16, 1590.78, 25452.48, 'Outflow'),
(11, '2025-05-14', 7, 'buy', 7, 284.17, 1989.19, 'Inflow'),
(12, '2025-05-24', 6, 'sell', 27, 987.35, 26658.45, 'Outflow'),
(13, '2025-05-11', 1, 'buy', 4, 864.98, 3459.92, 'Inflow'),
(14, '2025-05-15', 2, 'buy', 13, 461.4, 5998.2, 'Inflow'),
(15, '2025-05-08', 3, 'sell', 12, 629.24, 7550.88, 'Outflow'),
(16, '2025-05-21', 2, 'sell', 36, 286.03, 10297.08, 'Outflow'),
(17, '2025-05-28', 9, 'buy', 6, 1860.1, 11160.6, 'Inflow'),
(18, '2025-05-07', 4, 'buy', 27, 1022.72, 27613.44, 'Inflow'),
(21, '2025-05-07', 9, 'sell', 10, 460.81, 4608.1, 'Outflow'),
(22, '2025-05-02', 1, 'buy', 48, 695.85, 33400.8, 'Inflow'),
(23, '2025-05-17', 10, 'sell', 33, 1846.84, 60945.72, 'Outflow'),
(24, '2025-05-06', 3, 'buy', 33, 252.21, 8322.93, 'Inflow'),
(25, '2025-05-13', 2, 'buy', 44, 1737.46, 76448.24, 'Inflow'),
(26, '2025-09-11', 3, 'sell', 28, 437.14, 12239.92, 'Outflow'),
```

(27, '2025-11-27', 5, 'sell', 67, 1632.99, 109410.33, 'Outflow'),

```
(28, '2025-09-01', 9, 'buy', 64, 883.97, 56574.08, 'Inflow'),
(29, '2025-06-15', 9, 'sell', 99, 1575.18, 155942.82, 'Outflow'),
(31, '2025-08-11', 7, 'sell', 71, 915.09, 64971.39, 'Outflow'),
(33, '2025-09-11', 8, 'buy', 18, 1814.85, 32667.3, 'Inflow'),
(34, '2025-09-30', 3, 'sell', 21, 1670.27, 35075.67, 'Outflow'),
(35, '2025-08-14', 5, 'sell', 10, 1801.49, 18014.9, 'Outflow'),
(36, '2025-08-27', 3, 'sell', 67, 120.59, 8079.53, 'Outflow'),
(37, '2025-09-25', 7, 'buy', 10, 273.44, 2734.4, 'Inflow'),
(40, '2025-10-30', 7, 'buy', 98, 952.05, 93300.9, 'Inflow'),
(41, '2025-10-09', 4, 'buy', 10, 724.46, 7244.6, 'Inflow'),
(42, '2025-10-28', 7, 'sell', 25, 1529.51, 38237.75, 'Outflow'),
(45, '2025-08-27', 6, 'buy', 72, 1144.1, 82375.2, 'Inflow'),
(46, '2025-11-05', 9, 'sell', 78, 1786.64, 139357.92, 'Outflow').
(48, '2025-10-08', 7, 'sell', 76, 1546.87, 117562.12, 'Outflow'),
(51, '2025-07-28', 9, 'buy', 25, 1661.53, 41538.25, 'Inflow'),
(53, '2025-08-28', 6, 'buy', 95, 1974.62, 187588.9, 'Inflow'),
(54, '2025-07-19', 9, 'sell', 66, 804.22, 53078.52, 'Outflow'),
(55, '2025-07-29', 1, 'sell', 38, 1899.77, 72191.26, 'Outflow'),
(56, '2025-11-17', 8, 'buy', 87, 1531.42, 133233.54, 'Inflow'),
(57, '2025-06-15', 6, 'buy', 78, 258.65, 20174.7, 'Inflow'),
(58, '2025-11-22', 8, 'sell', 56, 1160.97, 65014.32, 'Outflow'),
(64, '2025-07-21', 1, 'sell', 99, 1208.4, 119631.6, 'Outflow'),
(66, '2025-06-21', 1, 'sell', 94, 1750.34, 164531.96, 'Outflow'),
(71, '2025-08-28', 6, 'sell', 78, 1152.32, 89880.96, 'Outflow'),
(72, '2025-07-30', 4, 'sell', 43, 1093.89, 47037.27, 'Outflow'),
(73, '2025-06-14', 6, 'sell', 61, 1421.92, 86737.12, 'Outflow'),
(74, '2025-06-09', 1, 'sell', 19, 1292.36, 24554.84, 'Outflow'),
(76, '2025-07-23', 3, 'buy', 67, 633.83, 42466.61, 'Inflow'),
(78, '2025-08-23', 3, 'buy', 78, 1278.25, 99703.5, 'Inflow'),
(79, '2025-08-31', 4, 'buy', 13, 457.43, 5946.59, 'Inflow'),
(80, '2025-09-19', 4, 'sell', 25, 771.37, 19284.25, 'Outflow'),
(81, '2025-11-19', 8, 'buy', 33, 247.7, 8174.1, 'Inflow'),
(82, '2025-06-08', 2, 'sell', 89, 1973.8, 175668.2, 'Outflow'),
(83, '2025-11-22', 9, 'buy', 11, 1118.58, 12304.38, 'Inflow'),
(84, '2025-07-05', 7, 'sell', 41, 1646.21, 67494.61, 'Outflow'),
(85, '2025-08-20', 3, 'sell', 93, 408.97, 38034.21, 'Outflow'),
(86, '2025-11-11', 9, 'sell', 33, 1662.82, 54873.06, 'Outflow'),
(87, '2025-07-20', 1, 'sell', 21, 1478.87, 31056.27, 'Outflow'),
(88, '2025-09-12', 5, 'buy', 59, 894.66, 52784.94, 'Inflow'),
(90, '2025-06-02', 3, 'sell', 42, 150.1, 6304.2, 'Outflow'),
(91, '2025-10-12', 3, 'sell', 42, 1640.05, 68882.1, 'Outflow'),
(92, '2025-07-24', 6, 'buy', 70, 385.79, 27005.3, 'Inflow'),
(93, '2025-09-14', 8, 'sell', 60, 823.69, 49421.4, 'Outflow'),
(94, '2025-06-04', 1, 'buy', 52, 1700.03, 88401.56, 'Inflow'),
```

```
(95, '2025-07-24', 6, 'sell', 21, 990.52, 20800.92, 'Outflow'),
(97, '2025-07-14', 9, 'buy', 74, 1742.97, 128979.78, 'Inflow'),
(98, '2025-11-09', 2, 'sell', 42, 1999.46, 83977.32, 'Outflow'),
(99, '2025-06-14', 2, 'buy', 49, 1155.32, 56610.68, 'Inflow'),
(100, '2025-09-03', 3, 'sell', 83, 1895.05, 157289.15, 'Outflow'),
(101, '2025-07-18', 9, 'sell', 52, 569.96, 29637.92, 'Outflow'),
(102, '2025-06-15', 4, 'sell', 53, 345.4, 18306.2, 'Outflow'),
(103, '2025-07-10', 5, 'buy', 38, 1251.73, 47565.74, 'Inflow'),
(104, '2025-08-21', 8, 'buy', 22, 1376.23, 30277.06, 'Inflow'),
(106, '2025-07-23', 1, 'sell', 55, 1375.99, 75679.45, 'Outflow'),
(107, '2025-06-24', 3, 'buy', 11, 1567.4, 17241.4, 'Inflow'),
(108, '2025-11-01', 6, 'sell', 44, 1719.14, 75642.16, 'Outflow'),
(109, '2025-10-02', 6, 'sell', 96, 1165.78, 111914.88, 'Outflow'),
(111, '2025-11-04', 2, 'buy', 99, 154.69, 15314.31, 'Inflow'),
(112, '2025-06-15', 1, 'buy', 17, 1278.59, 21736.03, 'Inflow'),
(114, '2025-08-04', 3, 'sell', 83, 127.63, 10593.29, 'Outflow'),
(116, '2025-08-10', 5, 'sell', 43, 931.2, 40041.6, 'Outflow'),
(117, '2025-06-09', 9, 'buy', 16, 761.69, 12187.04, 'Inflow'),
(118, '2025-08-27', 1, 'sell', 77, 1588.94, 122348.38, 'Outflow'),
(119, '2025-10-07', 3, 'sell', 67, 1281.96, 85891.32, 'Outflow'),
(121, '2025-08-02', 5, 'sell', 38, 1860.52, 70699.76, 'Outflow'),
(122, '2025-10-17', 1, 'buy', 45, 590.66, 26579.7, 'Inflow'),
(123, '2025-08-20', 2, 'buy', 98, 1962.06, 192281.88, 'Inflow'),
(124, '2025-10-14', 6, 'sell', 30, 724.63, 21738.9, 'Outflow');
INSERT INTO MarketPrices (Date, AssetID, MarketPrice, Month_Name) VALUES
('2025-06-01', 10, 255.77, 'June'),
('2025-06-04', 4, 1372.48, 'June'),
('2025-06-05', 6, 553.5, 'June'),
('2025-06-06', 7, 348.67, 'June'),
('2025-06-07', 5, 968.73, 'June'),
```

('2025-06-08', 2, 117.7, 'June'), ('2025-06-10', 2, 239.2, 'June'), ('2025-06-11', 4, 1061.18, 'June'), ('2025-06-12', 3, 1873.19, 'June'), ('2025-06-13', 2, 1770.61, 'June'), ('2025-06-14', 6, 641.48, 'June'), ('2025-06-15', 8, 1684.12, 'June'), ('2025-06-16', 5, 1262.19, 'June'), ('2025-06-17', 9, 114.86, 'June'), ('2025-06-18', 9, 668.82, 'June'), ('2025-06-19', 2, 1883.97, 'June'),

```
('2025-06-20', 3, 602.49, 'June'),
('2025-06-21', 2, 1510.59, 'June'),
('2025-06-22', 3, 617.46, 'June'),
('2025-06-23', 10, 500.2, 'June'),
('2025-06-24', 6, 486.83, 'June'),
('2025-06-25', 5, 1060.28, 'June');
```

# 3. Analysis Queries

limit 1:

```
-- Total Portfolio value
Select round(sum(Totalvalue)) as Total Investment from investmenttransactions;
-- Top 3 Asset by Total Value
SELECT
 a.assetname, ROUND(SUM(t.totalvalue)) AS Total_Investment
FROM
 investmenttransactions t
   JOIN
 assets a ON t.AssetID = a.AssetID
GROUP BY a.AssetName
ORDER BY Total Investment DESC
LIMIT 3:
-- MONTHLY INVESTMENT FLOW (INFLOW / OUTFLOW)
SELECT D.MONTH, T.investmentflow, ROUND(SUM(T.totalvalue), 2) AS total FROM
Investmenttransactions T JOIN
dates D ON T.DATE=D.DATE
GROUP BY D.MONTH, T. investmentflow
ORDER BY D.MONTH:
-- Number of Assets Managed by Each Broker
Select b.Brokername,count(a.assetid) as asset count
from brokers b join assets a
on b.brokerid=a.brokerid group by b.brokername
order by asset_count desc;
-- which broker holds the highest total investment value?
select b.brokername, round(sum(t.totalvalue),2) as tot_value
from brokers b
join assets a on b.brokerid = a.brokerid
join investmenttransactions t on a.assetid = t.assetid
group by b.brokername
order by tot_value desc
```

```
-- LAST THREE TRANSACTIONS
SELECT T.transactionid, T.DATE, T.quantity,
T.TYPE,T.priceperunit,T.totalvalue,T.assetid,
A.assetname FROM investmenttransactions T JOIN
assets A ON T.assetid=A.assetid
ORDER BY DATE DESC LIMIT 3;
-- Same Assets Invested on More Than 8 Days
SELECT AssetName
FROM Assets
WHERE AssetID IN (
 SELECT AssetID
 FROM InvestmentTransactions
 GROUP BY AssetID
 HAVING COUNT(DISTINCT Date) > 8
);
-- Percentage of Investment per Broker
SELECT BrokerName,
   ROUND((SUM(t.TotalValue) / (SELECT SUM(TotalValue)
                             FROM InvestmentTransactions)) * 100, 2)
   AS InvestmentShare
FROM InvestmentTransactions t
JOIN ASSETS A ON T.ASSETID=A.ASSETID
JOIN Brokers b ON B.BrokerID = A.BrokerID
GROUP BY BrokerName;
-- Average Price Per Unit for Each Asset
SELECT
 a.AssetName.
 ROUND(AVG(it.PricePerUnit), 2) AS AvgPrice
FROM InvestmentTransactions it
JOIN Assets a ON it.AssetID = a.AssetID
GROUP BY it. AssetID;
-- Daily Investment Summary
SELECT
 Date,
 round(SUM(Quantity * PricePerUnit),2) AS TotalInvested
FROM InvestmentTransactions
GROUP BY Date
ORDER BY Date:
```

-- Least Invested Broker

SELECT
b.BrokerName,
round(SUM(it.quantity \* it.PricePerUnit),2) AS TotalInvested
FROM InvestmentTransactions it
JOIN assets a on a.assetid=it.assetid
JOIN Brokers b ON b.BrokerID = a.BrokerID
GROUP BY b.BrokerID
ORDER BY TotalInvested ASC
LIMIT 1;

-- Average Units Invested per Transaction SELECT AVG(quantity) AS AvgUnitsPerTransaction FROM InvestmentTransactions;