AY 2025/26 SEMESTER 2

NANYANG TECHNOLOGICAL UNIVERSITY
SINGAPORE

SC2207 Introduction to Databases

Lab Group: SCMB

Group: 2

Number	Group members
01	Loh Zhi Ye Bryan
02	Tan Xie En Barnabas
03	Goh Qing Wen
04	Dashini Naidu

INDIVIDUAL CONTRIBUTION FORM

Full Name	Individual Contribution to Lab 5 Submission	Percentage of Contribution	Signature
Loh Zhi Ye Bryan	Helped with: Table Creation Data Insertion SQL Query SQL Explanation	25%	
Tan Xie En Barnabas	Helped with: Table Creation Data Insertion SQL Query SQL Explanation	25%	
Goh Qing Wen	Helped with: Table Creation Data Insertion SQL Query SQL Explanation	25%	
Dashini Naidu	Helped with: Table Creation Data Insertion SQL Query SQL Explanation	25%	

USE OF AI TOOL(S) IN LAB WORK

Each team member should indicate either A or B:

A. I affirm that my contribution(s) to the lab work is my own, produced without help from any AI tool(s).

B. I affirm that my contribution(s) to the lab work has been produced with the use of AI tool(s).

Team member (full name)	Signature	Date	A or B
Loh Zhi Ye Bryan		31/3/2025	A
Tan Xie En Barnabas		31/3/2025	A
Goh Qing Wen		31/3/2025	A
Dashini Naidu		31/3/2025	A

By signing this form, you declare that the above affirmation made is true and that you have read and understood NTU's policy on the use of AI tools.

If any team member answered B, the team member(s) must indicate and replicate the table below for every instance that AI tool(s) is used:

Name of AI tool	< For example, ChatGPT >
Input prompt	< Insert the question that you asked ChatGPT >
Date generated	
Output generated	< Insert the response verbatim from ChatGPT >
Output screenshots	
Impact on submission	< Briefly explain which part of your submitted work was ChatGPT's response applied >

SQL DDL Commands for Table Creation and Data Insertion:

Table Creation:

```
CREATE TABLE FINANCIAL_GOAL(
Goal VARCHAR(200),
Phone VARCHAR(15),
Amount FLOAT,
Timeline VARCHAR(100),
PRIMARY KEY(Goal,Phone)
);

CREATE TABLE RISK_TOLERANCE(
Risk_Level VARCHAR(30),
Phone VARCHAR(15),
Q1_Answer VARCHAR(100),
Q2_Answer VARCHAR(100),
Q3_Answer VARCHAR(100),
Q4_Answer VARCHAR(100),
Q5_Answer VARCHAR(100),
PRIMARY KEY(Risk_Level,Phone)
);

CREATE TABLE INVESTOR(
Phone VARCHAR(15),
I_Name VARCHAR(30),
Gender VARCHAR(10),
DoB DATE,
Annual_Income FLOAT,
Company VARCHAR(100),
PRIMARY KEY(Phone)
);

CREATE TABLE PORTFOLIO_1(
P_ID VARCHAR(15),
Phone VARCHAR(15),
Market_Value FLOAT,
Inception_Date DATE,
PRIMARY KEY(P_ID,Phone)
);
```

```
CREATE TABLE PORTFOLIO_2(
Market_Value FLOAT,
Inception_Date DATE,
Annualized_Return FLOAT,
PRIMARY KEY(Market_Value,Inception_Date)
);

CREATE TABLE PORTFOLIO_3(
Fee FLOAT,
Market_Value FLOAT,
Annualized_Return FLOAT,
PRIMARY KEY(Market_Value,Annualized_Return)
);

CREATE TABLE INVESTED_VALUE(
I_Date DATE,
P_ID VARCHAR(15),
Phone VARCHAR(15),
Amount FLOAT,
PRIMARY KEY(I_Date,P_ID,Phone)
);

CREATE TABLE UNREALIZED_GAIN_LOSS(
GL_Date DATE,
P_ID VARCHAR(15),
Phone VARCHAR(15),
Amount FLOAT,
PRIMARY KEY(GL_Date,P_ID,Phone)
);

CREATE TABLE STOCK_IN_PORTFOLIO_1(
ID VARCHAR(15),
Start_Date DATE,
Post_Trade_CO VARCHAR(100),
PID VARCHAR(15),
Phone VARCHAR(15),
Stock_ID VARCHAR(15),
PRIMARY KEY(ID)
);




CREATE TABLE STOCK_IN_PORTFOLIO_2(
Allocation_Ratio FLOAT,
```

```
PID VARCHAR(15),
Phone VARCHAR(15),
PRIMARY KEY(Phone,PID)
);


CREATE TABLE BOND_IN_PORTFOLIO_1(
ID VARCHAR(15),
Start_Date DATE,
Post_Trade_CO VARCHAR(100),
PID VARCHAR(15),
Phone VARCHAR(15),
Bond_ID VARCHAR(15),
PRIMARY KEY(ID)
);

CREATE TABLE BOND_IN_PORTFOLIO_2(
Allocation_Ratio FLOAT,
PID VARCHAR(15),
Phone VARCHAR(15),
PRIMARY KEY(Phone,PID)
);

CREATE TABLE FUND_IN_PORTFOLIO_1(
ID VARCHAR(15),
Start_Date DATE,
Post_Trade_CO VARCHAR(100),
PID VARCHAR(15),
Phone VARCHAR(15),
Fund_ID VARCHAR(15),
PRIMARY KEY(ID)
);

CREATE TABLE FUND_IN_PORTFOLIO_2(
Allocation_Ratio FLOAT,
PID VARCHAR(15),
Phone VARCHAR(15),
PRIMARY KEY(Phone,PID)
);




CREATE TABLE STOCK_TRANSACTION(
T_Date DATE,
```

```
Stock_In_Portfolio_ID VARCHAR(15),
T_Type VARCHAR(15),
Fee FLOAT,
PRIMARY KEY(T_Date,Stock_In_Portfolio_ID)
);

CREATE TABLE BOND_TRANSACTION(
T_Date DATE,
Bond_In_Portfolio_ID VARCHAR(15),
T_Type VARCHAR(15),
Fee FLOAT,
PRIMARY KEY(T_Date,Bond_In_Portfolio_ID)
);

CREATE TABLE FUND_TRANSACTION(
T_Date DATE,
Fund_In_Portfolio_ID VARCHAR(15),
T_Type VARCHAR(15),
Fee FLOAT,
PRIMARY KEY(T_Date,Fund_In_Portfolio_ID)
);

CREATE TABLE ASSET(
ID VARCHAR(15),
A_Name VARCHAR(30),
Price FLOAT,
PRIMARY KEY(ID)
);

CREATE TABLE STOCK(
ID VARCHAR(15),
P_E_Ratio FLOAT,
EPS FLOAT,
EBITDA FLOAT,
PRIMARY KEY(ID)
);

CREATE TABLE BOND(
ID VARCHAR(15),
Interest_Rate FLOAT,
Maturity_Date DATE,
PRIMARY KEY(ID)
);



CREATE TABLE FUND(
ID VARCHAR(15),
```

```
Expense_Ratio FLOAT,
Dividend_Yield FLOAT,
PRIMARY KEY(ID)
);
```

Data Entry:

```
INSERT INTO investor VALUES
('12345678','Alpha','Male','1950-01-01',6000.00,'Company A'),
('12345677','Beta','Female','2003-02-02',5000.00,'Company B'),
('12345676','Charlie','Male','1990-03-03',4000.00,'Company B'),
('12345675','Delta','Female','2000-04-04',9000.00,'Company D'),
('12345674','Echo','Male','1991-05-03',56000.00,'Company B'),
('12345673','Foxtrot','Female','1992-05-03',56000.00,'Company B'),
('12345672','Gamma','Male','2002-06-03',56000.00,'Company C'),
('12345671','Hotel','Female','1995-05-03',56000.00,'Company C');

INSERT INTO risk_tolerance VALUES
('High','12345678','Agree','Agree','Agree','Agree','Agree'),
('Low','12345677','Disagree','Disagree','Disagree','Disagree','Disagree'),
('Medium','12345676','Agree','Disagree','Agree','Disagree','Agree'),
('High','12345675','Agree','Agree','Agree','Agree','Disagree'),
('Low','12345674','Agree','Disagree','Disagree','Disagree','Disagree'),
('Medium','12345673','Agree','Disagree','Agree','Disagree','Disagree'),
('High','12345672','Agree','Disagree','Agree','Agree','Agree'),
('Low','12345671','Disagree','Agree','Agree','Disagree','Disagree');

INSERT INTO financial_goal VALUES
('Retirement Fund','12345678',900000,'2024-01-01(20 Years)'),
('Vacation Fund','12345678',10000,'2023-01-01(2 Years)'),
('College Fund','12345677',20000,'2024-01-01(5 Years)'),
('Retirement Fund','12345677',900000,'2024-01-01(20 Years)'),
('College Fund','12345676',20000,'2025-01-01(5 Years)'),
('Vacation Fund','12345676',10000,'2024-01-01(2 Years)'),
('Retirement Fund','12345676',900000,'2022-01-01(20 Years)'),
('PHD Fund','12345675',30000,'2024-01-01(7 Years)'),
('First Car Fund','12345675',200000,'2021-01-01(10 Years)'),
('Retirement Fund','12345674',900000,'2024-01-01(20 Years)'),
('Vacation Fund','12345674',20000,'2024-01-01(5 Years)'),
('Retirement Fund','12345673',900000,'2024-01-01(20 Years)'),
('College Fund','12345673',10000,'2022-01-01(2 Years)'),
('Vacation Fund','12345673',10000,'2024-01-01(2 Years)'),
('Retirement Fund','12345672',900000,'2023-01-01(20 Years)'),
```

('PHD Fund','12345672',30000,'2024-01-01(7 Years)'),
('Retirement Fund','12345671',900000,'2022-01-01(20 Years)'),
('Masters Fund','12345671',30000,'2020-01-01(7 Years)');

INSERT INTO portfolio_1 VALUES('11','12345678',1.00,'2024-01-01');
INSERT INTO portfolio_1 VALUES('12','12345678',3.00,'2024-01-01');
INSERT INTO portfolio_1 VALUES('21','12345677',9.00,'2025-01-01');
INSERT INTO portfolio_1 VALUES('22','12345677',9.00,'2023-01-01');
INSERT INTO portfolio_1 VALUES('31','12345676',9.00,'2022-01-01');
INSERT INTO portfolio_1 VALUES('32','12345676',4.00,'2024-01-02');
INSERT INTO portfolio_1 VALUES('41','12345675',6.00,'2024-01-02');
INSERT INTO portfolio_1 VALUES('42','12345675',3.00,'2023-01-02');
INSERT INTO portfolio_1 VALUES('51','12345674',9.00,'2023-01-20');
INSERT INTO portfolio_1 VALUES('52','12345674',9.00,'2022-01-02');
INSERT INTO portfolio_1 VALUES('61','12345673',5.00,'2024-01-03');
INSERT INTO portfolio_1 VALUES('62','12345673',7.00,'2024-01-03');
INSERT INTO portfolio_1 VALUES('71','12345672',8.00,'2020-01-03');
INSERT INTO portfolio_1 VALUES('72','12345672',9.00,'2023-01-09');
INSERT INTO portfolio_1 VALUES('73','12345672',9.00,'2022-01-03');
INSERT INTO portfolio_1 VALUES('74','12345672',3.00,'2024-01-04');
INSERT INTO portfolio_1 VALUES('81','12345671',2.00,'2024-01-04');
INSERT INTO portfolio_1 VALUES('82','12345671',5.00,'2021-01-04');
INSERT INTO portfolio_1 VALUES('83','12345671',9.00,'2023-01-12');
INSERT INTO portfolio_1 VALUES('84','12345671',9.00,'2022-01-23');

INSERT INTO portfolio_2 VALUES(1.00,'2024-01-01',10);
INSERT INTO portfolio_2 VALUES(3.00,'2024-01-01',30);
INSERT INTO portfolio_2 VALUES(9.00,'2025-01-01',40);
INSERT INTO portfolio_2 VALUES(9.00,'2023-01-01',10);
INSERT INTO portfolio_2 VALUES(9.00,'2022-01-01',2);
INSERT INTO portfolio_2 VALUES(4.00,'2024-01-02',3);
INSERT INTO portfolio_2 VALUES(6.00,'2024-01-02',4);
INSERT INTO portfolio_2 VALUES(3.00,'2023-01-02',50);
INSERT INTO portfolio_2 VALUES(9.00,'2023-01-20',9);
INSERT INTO portfolio_2 VALUES(9.00,'2022-01-02',11);
INSERT INTO portfolio_2 VALUES(5.00,'2024-01-03',20);
INSERT INTO portfolio_2 VALUES(7.00,'2024-01-03',5);
INSERT INTO portfolio_2 VALUES(8.00,'2020-01-03',6);
INSERT INTO portfolio_2 VALUES(9.00,'2023-01-09',7);
INSERT INTO portfolio_2 VALUES(9.00,'2022-01-03',12);
INSERT INTO portfolio_2 VALUES(3.00,'2024-01-04',40);
INSERT INTO portfolio_2 VALUES(2.00,'2024-01-04',50);
INSERT INTO portfolio_2 VALUES(5.00,'2021-01-04',8);
INSERT INTO portfolio_2 VALUES(9.00,'2023-01-12',8);
INSERT INTO portfolio_2 VALUES(9.00,'2022-01-23',30);

INSERT INTO portfolio_3 VALUES(10,1.00,10);
INSERT INTO portfolio_3 VALUES(12,3.00,30);

```
INSERT INTO portfolio_3 VALUES(100,9.00,40);
INSERT INTO portfolio_3 VALUES(69,9.00,10);
INSERT INTO portfolio_3 VALUES(420,9.00,2);
INSERT INTO portfolio_3 VALUES(1000,4.00,3);
INSERT INTO portfolio_3 VALUES(45,6.00,4);
INSERT INTO portfolio_3 VALUES(23,3.00,50);
INSERT INTO portfolio_3 VALUES(11,9.00,9);
INSERT INTO portfolio_3 VALUES(14,9.00,11);
INSERT INTO portfolio_3 VALUES(15,5.00,20);
INSERT INTO portfolio_3 VALUES(17,7.00,5);
INSERT INTO portfolio_3 VALUES(18,8.00,6);
INSERT INTO portfolio_3 VALUES(20,9.00,7);
INSERT INTO portfolio_3 VALUES(30,9.00,12);
INSERT INTO portfolio_3 VALUES(41,3.00,40);
INSERT INTO portfolio_3 VALUES(50,2.00,50);
INSERT INTO portfolio_3 VALUES(44,5.00,8);
INSERT INTO portfolio_3 VALUES(67,9.00,8);
INSERT INTO portfolio_3 VALUES(78,9.00,3);

INSERT INTO invested_value VALUES('2024-01-02','11','12345678',200);
INSERT INTO invested_value VALUES('2024-02-02','12','12345678',100);
INSERT INTO invested_value VALUES('2025-03-02','21','12345677',450);
INSERT INTO invested_value VALUES('2024-04-03','22','12345677',80);
INSERT INTO invested_value VALUES('2024-05-03','31','12345676',900);
INSERT INTO invested_value VALUES('2023-06-03','32','12345676',120);
INSERT INTO invested_value VALUES('2024-07-04','41','12345675',130);
INSERT INTO invested_value VALUES('2024-08-04','42','12345675',300);
INSERT INTO invested_value VALUES('2020-09-04','51','12345674',200);
INSERT INTO invested_value VALUES('2024-10-05','52','12345674',1000);
INSERT INTO invested_value VALUES('2024-11-05','61','12345673',2000);
INSERT INTO invested_value VALUES('2021-12-05','62','12345673',700);
INSERT INTO invested_value VALUES('2024-11-14','71','12345672',400);
INSERT INTO invested_value VALUES('2024-01-01','72','12345672',5600);
INSERT INTO invested_value VALUES('2022-12-05','73','12345672',600);
INSERT INTO invested_value VALUES('2023-10-05','74','12345672',800);
INSERT INTO invested_value VALUES('2024-11-14','81','12345671',4500);
INSERT INTO invested_value VALUES('2024-01-01','82','12345671',500);
INSERT INTO invested_value VALUES('2022-12-05','83','12345671',200);
INSERT INTO invested_value VALUES('2023-10-05','84','12345671',700);

INSERT INTO unrealized_gain_loss VALUES('2024-01-02','11','12345678',-900);
INSERT INTO unrealized_gain_loss VALUES('2024-02-02','12','12345678',200);
INSERT INTO unrealized_gain_loss VALUES('2025-03-02','21','12345677',300);
INSERT INTO unrealized_gain_loss VALUES('2024-03-02','22','12345677',300);
INSERT INTO unrealized_gain_loss VALUES('2024-04-03','31','12345676',600);
INSERT INTO unrealized_gain_loss VALUES('2024-05-03','32','12345676',200);
INSERT INTO unrealized_gain_loss VALUES('2024-06-02','41','12345675',300);
INSERT INTO unrealized_gain_loss VALUES('2023-06-03','42','12345675',-100);
```

```
INSERT INTO unrealized_gain_loss VALUES('2024-07-04','51','12345674',-1000);
INSERT INTO unrealized_gain_loss VALUES('2024-08-04','52','12345674',900);
INSERT INTO unrealized_gain_loss VALUES('2020-09-04','61','12345673',200);
INSERT INTO unrealized_gain_loss VALUES('2024-09-04','62','12345673',200);
INSERT INTO unrealized_gain_loss VALUES('2024-10-05','71','12345672',-1000);
INSERT INTO unrealized_gain_loss VALUES('2024-11-05','72','12345672',-2000);
INSERT INTO unrealized_gain_loss VALUES('2021-12-05','73','12345672',700);
INSERT INTO unrealized_gain_loss VALUES('2024-12-05','74','12345672',700);
INSERT INTO unrealized_gain_loss VALUES('2024-10-05','81','12345671',-1000);
INSERT INTO unrealized_gain_loss VALUES('2024-11-05','82','12345671',-2000);
INSERT INTO unrealized_gain_loss VALUES('2021-12-05','83','12345671',700);
INSERT INTO unrealized_gain_loss VALUES('2024-12-05','84','12345671',700);

INSERT INTO stock_in_portfolio_1 VALUES
('1','2019-01-12', 'Saxo','11','12345678','1'),
('2','2020-02-13', 'Saxo','21','12345677','2'),
('3','2019-05-11', 'Saxo','31','12345676','3'),
('4','2022-04-20', 'Saxo','41','12345675','4'),
('5','2023-01-11', 'Saxo','51','12345674','1'),
('6','2024-05-09', 'Saxo','61','12345673','2'),
('7','2021-07-12', 'Saxo','71','12345672','3'),
('8','2020-01-05', 'Saxo','81','12345671','4');

INSERT INTO stock_in_portfolio_2 VALUES
(40,'11','12345678'),
(10,'21','12345677'),
(20,'31','12345676'),
(30,'41','12345675'),
(9,'51','12345674'),
(5,'61','12345673'),
(30,'71','12345672'),
(40,'81','12345671');

INSERT INTO stock_transaction VALUES('2024-01-01', '1', 'Buy', 10.00);
INSERT INTO stock_transaction VALUES('2024-01-02', '1', 'Sell', 100.00);
INSERT INTO stock_transaction VALUES('2024-02-01', '2', 'Buy', 100.00);
INSERT INTO stock_transaction VALUES('2024-02-02', '2', 'Sell', 10.00);
INSERT INTO stock_transaction VALUES('2024-01-03', '3', 'Buy', 1000.00);
INSERT INTO stock_transaction VALUES('2024-01-04', '3', 'Sell', 50.00);
INSERT INTO stock_transaction VALUES('2024-02-03', '4', 'Buy', 10.00);
INSERT INTO stock_transaction VALUES('2024-01-01', '4', 'Buy', 10.00);
INSERT INTO stock_transaction VALUES('2024-02-01', '5', 'Buy', 10.00);
INSERT INTO stock_transaction VALUES('2024-03-01', '5', 'Buy', 10.00);
INSERT INTO stock_transaction VALUES('2024-04-01', '6', 'Buy', 10.00);
INSERT INTO stock_transaction VALUES('2024-05-01', '6', 'Buy', 10.00);
INSERT INTO stock_transaction VALUES('2024-06-01', '6', 'Buy', 10.00);
INSERT INTO stock_transaction VALUES('2024-07-01', '7', 'Buy', 10.00);
INSERT INTO stock_transaction VALUES('2024-08-01', '7', 'Buy', 10.00);
```

```
INSERT INTO stock_transaction VALUES('2024-09-01', '8', 'Buy', 10.00);
INSERT INTO stock_transaction VALUES('2024-10-01', '8', 'Buy', 10.00);
INSERT INTO stock_transaction VALUES('2024-12-01', '2', 'Buy', 10.00);
INSERT INTO stock_transaction VALUES('2024-02-01', '1', 'Buy', 10.00);
INSERT INTO stock_transaction VALUES('2024-03-01', '1', 'Buy', 10.00);
INSERT INTO stock_transaction VALUES('2024-04-01', '1', 'Buy', 10.00);
INSERT INTO stock_transaction VALUES('2024-05-01', '1', 'Buy', 10.00);
INSERT INTO stock_transaction VALUES('2024-06-01', '1', 'Buy', 10.00);
INSERT INTO stock_transaction VALUES('2024-07-01', '1', 'Buy', 10.00);
INSERT INTO stock_transaction VALUES('2024-08-01', '1', 'Buy', 10.00);
INSERT INTO stock_transaction VALUES('2024-09-01', '1', 'Buy', 10.00);
INSERT INTO stock_transaction VALUES('2024-10-01', '1', 'Buy', 10.00);
INSERT INTO stock_transaction VALUES('2024-11-01', '1', 'Buy', 10.00);
INSERT INTO stock_transaction VALUES('2024-12-01', '1', 'Buy', 10.00);


INSERT INTO bond_in_portfolio_1 VALUES
('1','2019-01-12', 'Clearstream','12','12345678','5'),
('2','2020-02-13', 'Clearstream','22','12345677','6'),
('3','2019-05-11', 'Clearstream','32','12345676','7'),
('4','2022-04-20', 'Clearstream','42','12345675','8'),
('5','2023-01-11', 'Clearstream','52','12345674','5'),
('6','2024-05-09', 'Clearstream','62','12345673','6'),
('7','2021-07-12', 'Clearstream','72','12345672','7'),
('8','2020-01-05', 'Clearstream','82','12345671','8');

INSERT INTO bond_in_portfolio_2 VALUES
(20,'12','12345678'),
(5,'22','12345677'),
(10,'32','12345676'),
(15,'42','12345675'),
(4,'52','12345674'),
(2,'62','12345673'),
(15,'72','12345672'),
(20,'82','12345671');

INSERT INTO bond_transaction VALUES
('2024-01-01', '1', 'Buy', 45.00),
('2024-01-02', '1', 'Sell', 400.00),
('2024-02-01', '2', 'Buy', 10.00),
('2024-01-02', '2', 'Sell', 130.00),
('2024-01-03', '3', 'Buy', 1030.00),
('2024-01-04', '3', 'Sell', 20.00),
('2024-02-03', '4', 'Buy', 10.00),
('2024-01-01', '4', 'Buy', 10.00),
('2024-02-01', '5', 'Buy', 10.00),
('2024-03-01', '5', 'Buy', 10.00),
('2024-04-01', '6', 'Buy', 10.00),
```

('2024-05-01', '6', 'Buy', 10.00),
('2024-06-01', '6', 'Buy', 10.00),
('2024-07-01', '7', 'Buy', 10.00),
('2024-08-01', '7', 'Buy', 10.00),
('2024-09-01', '8', 'Buy', 10.00),
('2024-10-01', '8', 'Buy', 10.00),
('2024-01-01', '2', 'Buy', 10.00),
('2024-03-01', '2', 'Buy', 10.00),
('2024-04-01', '2', 'Buy', 10.00),
('2024-05-01', '2', 'Buy', 10.00),
('2024-06-01', '2', 'Buy', 10.00),
('2024-07-01', '2', 'Buy', 10.00),
('2024-08-01', '2', 'Buy', 10.00),
('2024-09-01', '2', 'Buy', 10.00),
('2024-10-01', '2', 'Buy', 10.00),
('2024-11-01', '2', 'Buy', 10.00),
('2024-12-01', '2', 'Buy', 10.00);

INSERT INTO fund_in_portfolio_1 VALUES
('1','2019-01-12', 'Interactive Broker','12','12345678','9'),
('2','2020-02-13', 'Interactive Broker','21','12345677','10'),
('3','2019-05-11', 'Interactive Broker','32','12345676','11'),
('4','2022-04-20', 'Interactive Broker','41','12345675','12'),
('5','2023-01-11', 'Interactive Broker','52','12345674','9'),
('6','2024-05-09', 'Interactive Broker','61','12345673','10'),
('7','2021-07-12', 'Interactive Broker','73','12345672','11'),
('8','2020-01-05', 'Interactive Broker','83','12345671','12');

INSERT INTO fund_in_portfolio_2 VALUES
(10,'12','12345678'),
(2,'21','12345677'),
(5,'32','12345676'),
(7,'41','12345675'),
(2,'52','12345674'),
(1,'61','12345673'),
(7,'73','12345672'),
(10,'83','12345671');

INSERT INTO fund_transaction VALUES
('2024-01-01', '1', 'Buy', 34.00),
('2024-01-02', '1', 'Sell', 460.00),
('2024-02-01', '2', 'Buy', 111.00),
('2024-01-02', '2', 'Sell', 10.00),
('2024-01-03', '3', 'Buy', 130.00),
('2024-01-04', '3', 'Sell', 230.00),
('2024-02-03', '4', 'Buy', 14.00),
('2024-01-01', '4', 'Buy', 10.00),

('2024-02-01', '5', 'Buy', 10.00),
('2024-03-01', '5', 'Buy', 10.00),
('2024-04-01', '6', 'Buy', 10.00),
('2024-05-01', '6', 'Buy', 10.00),
('2024-06-01', '6', 'Buy', 10.00),
('2024-07-01', '7', 'Buy', 10.00),
('2024-08-01', '7', 'Buy', 10.00),
('2024-09-01', '8', 'Buy', 10.00),
('2024-10-01', '8', 'Buy', 10.00),
('2024-01-01', '3', 'Buy', 10.00),
('2024-02-01', '3', 'Buy', 10.00),
('2024-03-01', '3', 'Buy', 10.00),
('2024-04-01', '3', 'Buy', 10.00),
('2024-05-01', '3', 'Buy', 10.00),
('2024-06-01', '3', 'Buy', 10.00),
('2024-07-01', '3', 'Buy', 10.00),
('2024-08-01', '3', 'Buy', 10.00),
('2024-09-01', '3', 'Buy', 10.00),
('2024-10-01', '3', 'Buy', 10.00),
('2024-11-01', '3', 'Buy', 10.00),
('2024-12-01', '3', 'Buy', 10.00);

INSERT INTO ASSET VALUES
('1','Asset 1',120),
('2','Asset 2',30),
('3','Asset 3',10),
('4','Asset 4',220),
('5','Asset 5',140),
('6','Asset 6',320),
('7','Asset 7',620),
('8','Asset 8',230),
('9','Asset 9',670),
('10','Asset 10',20),
('11','Asset 11',30),
('12','Asset 12',12);

INSERT INTO STOCK VALUES
('1',10,10,10),
('2',20,20,20),
('3',30,30,30),
('4',40,40,40);

INSERT INTO BOND VALUES
('5',10,'2030-10-01'),
('6',5,'2035-10-01'),
('7',3,'2040-10-01'),
('8',7,'2050-10-01');

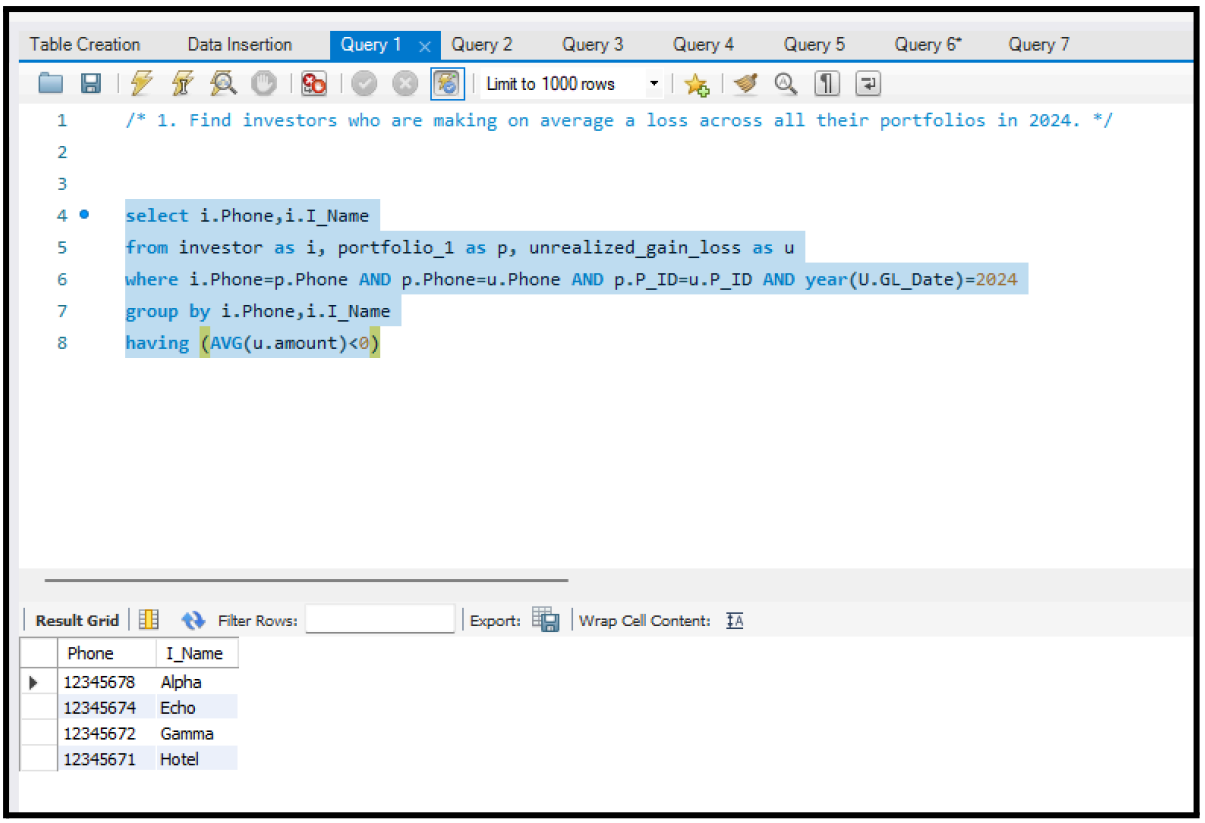
```
INSERT INTO FUND VALUES
('9',10,6),
('10',5,4),
('11',3,1),
('12',7,10);
```

SQL Queries (1-7):

Query 1: Find investors who are making on average a loss across all their portfolios in 2024.

```
select i.Phone,i.I_Name
from investor as i, portfolio_1 as p, unrealized_gain_loss as u
where i.Phone=p.Phone AND p.Phone=u.Phone AND p.P_ID=u.P_ID AND
year(U.GL_Date)=2024
group by i.Phone,i.I_Name
having (AVG(u.amount)<0)
```

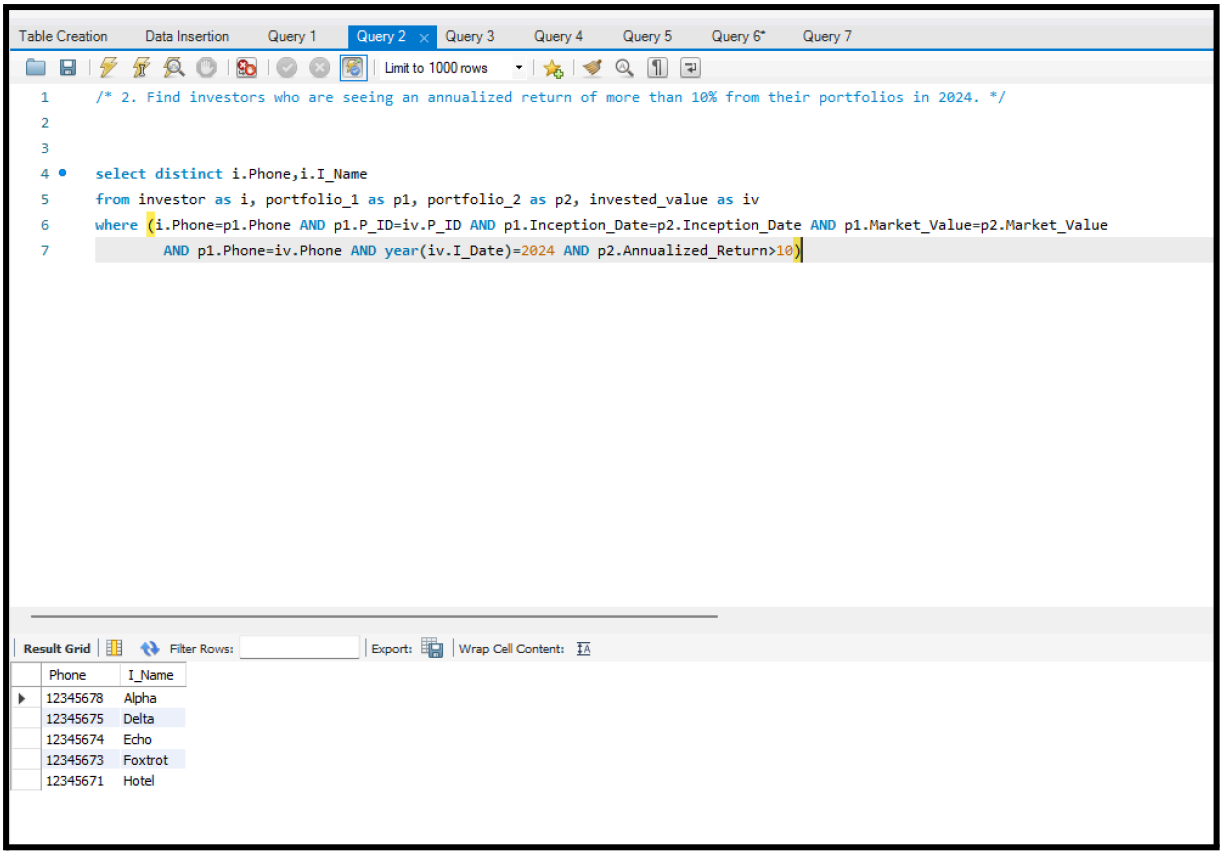
Explanation:
First, investor, portfolio_1, and unrealized_gain_loss are joined. Then, they are filtered such that the unrealized_gain_loss belonging to portfolio_1 belonging to the investor across their portfolios in 2024 is given. From which, the tuples are grouped according to the investor's phone and name, allowing the checking of the average returns for each investor, whether it is negative, thereby indicating whether they have an average loss.



Query 2: Find investors who are seeing an annualized return of more than 10% from their portfolios in 2024.

```
select distinct i.Phone,i.I_Name
from investor as i, portfolio_1 as p1, portfolio_2 as p2, invested_value as iv
where (i.Phone=p1.Phone AND p1.P_ID=iv.P_ID AND
p1.Inception_Date=p2.Inception_Date AND p1.Market_Value=p2.Market_Value
        AND p1.Phone=iv.Phone AND year(iv.I_Date)=2024 AND p2.Annualized_Return>10)
```

Explanation:
First, the relations of investor, portfolio information, portfolio return and invested value are joined. Then they are filtered such that the invested value belonging to the portfolio belonging to distinct investors whose the year of investment is in 2024 and annualized return (%) of more than 10 are given. The phone number and name of investors satisfying such conditions are selected.



Query 3: Find the monthly average unrealized gain/loss of portfolios for each month in 2024

SELECT month(U.GL_Date) as Month, AVG(U.Amount) as Average_Gain_Loss
FROM unrealized_gain_loss as U
WHERE year(U.GL_Date)=2024
GROUP BY month(U.GL cm_Date)

Explanation:
From the relation realized gain/loss, the month was grouped which will allow the average of the month to be selected and where the year is 2024.

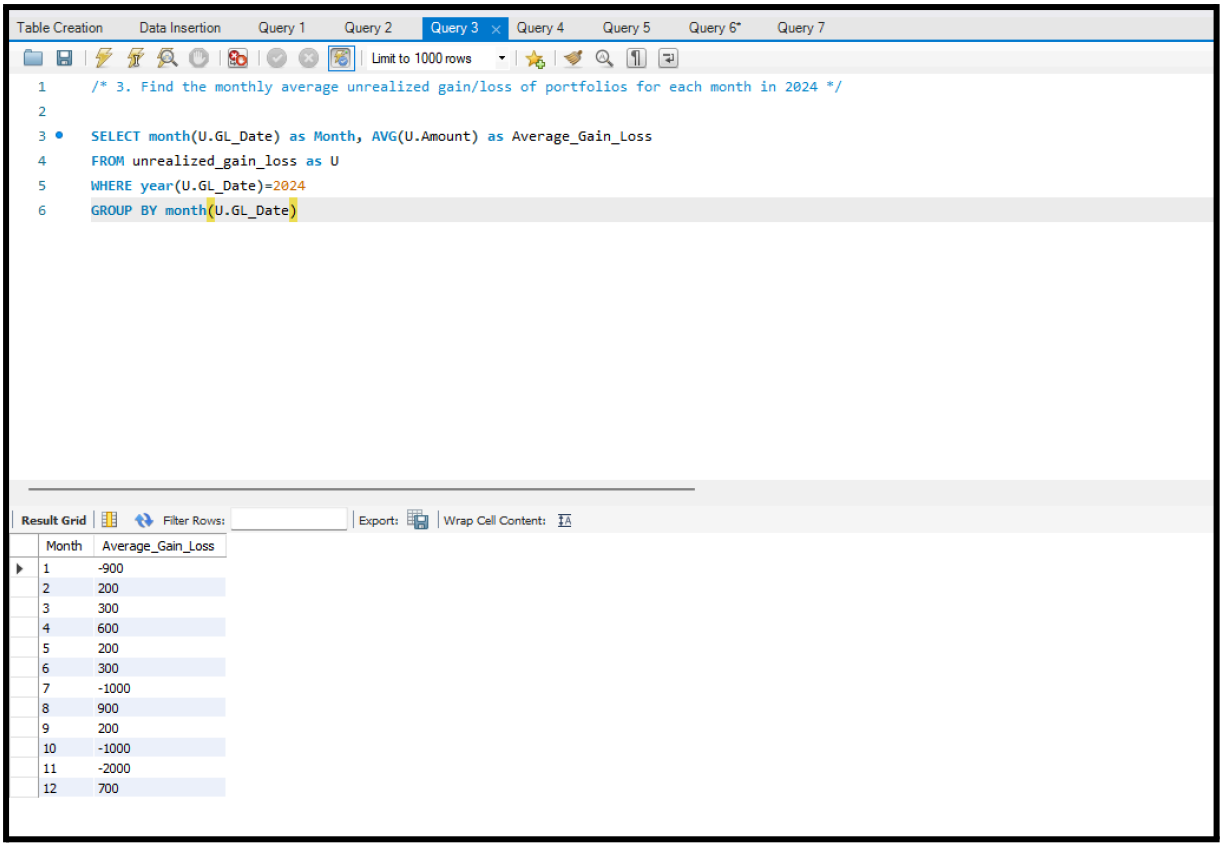
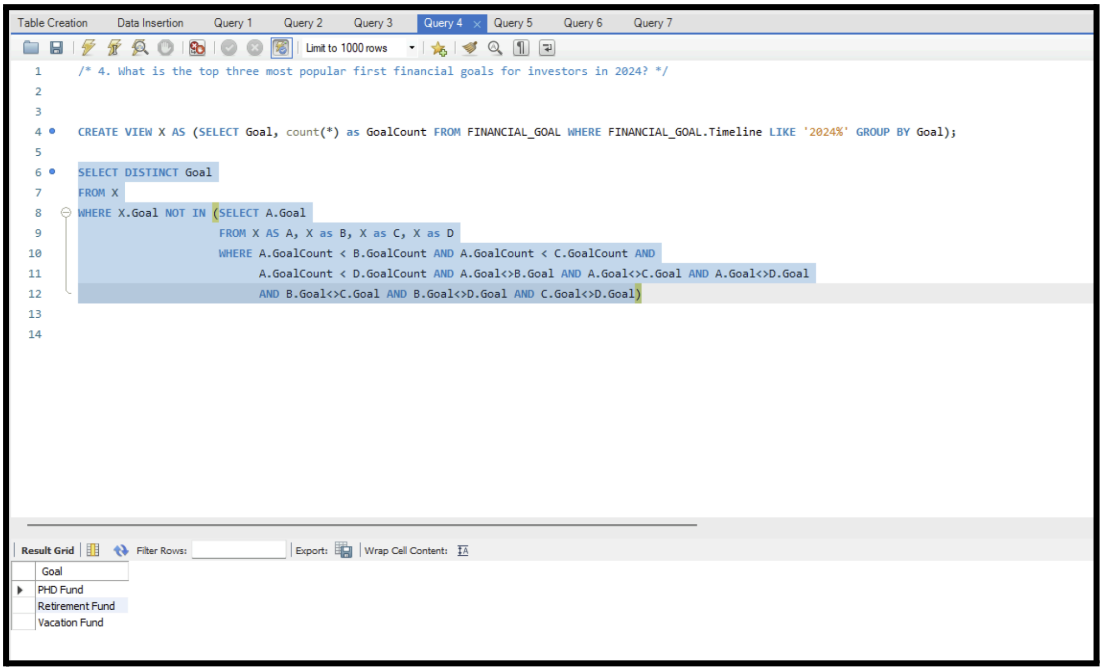


Table Creation
Data Insertion
Query 1
Query 2
Query 3
Query 4
Query 5
Query 6*
Query 7
Limit to 1000 rows
1 /* 3. Find the monthly average unrealized gain/loss of portfolios for each month in 2024 */
2
3 SELECT month(U.GL_Date) as Month, AVG(U.Amount) as Average_Gain_Loss
4 FROM unrealized_gain_loss as U
5 WHERE year(U.GL_Date)=2024
6 GROUP BY month(U.GL_Date)
Result Grid
Filter Rows:
Export:
Wrap Cell Content:
Month
Average_Gain_Loss
1 -900
2 200
3 300
4 600
5 200
6 300
7 -1000
8 900
9 200
10 -1000
11 -2000
12 700

Query 4: What is the top three most popular first financial goals for investors in 2024?

```
CREATE VIEW X AS (SELECT Goal, count(*) as GoalCount FROM FINANCIAL_GOAL
WHERE FINANCIAL_GOAL.Timeline LIKE '2024%' GROUP BY Goal);


SELECT DISTINCT Goal

FROM X

WHERE X.Goal NOT IN (SELECT A.Goal

                FROM X AS A, X as B, X as C, X as D

                WHERE A.GoalCount < B.GoalCount AND A.GoalCount < C.GoalCount AND

                A.GoalCount < D.GoalCount AND A.Goal<>B.Goal AND A.Goal<>C.Goal
AND A.Goal<>D.Goal

                AND B.Goal<>C.Goal AND B.Goal<>D.Goal AND C.Goal<>D.Goal)
```

Explanation:
The view X is the query of the count of each goal. After that, a subquery of goals where there are 3 goals with more count than it was created. As top 3 goals will not have 3 other goals with more count than it, goals were selected that are not in the subquery. To ensure the year is 2024, timeline should contain 2024 as the start date.

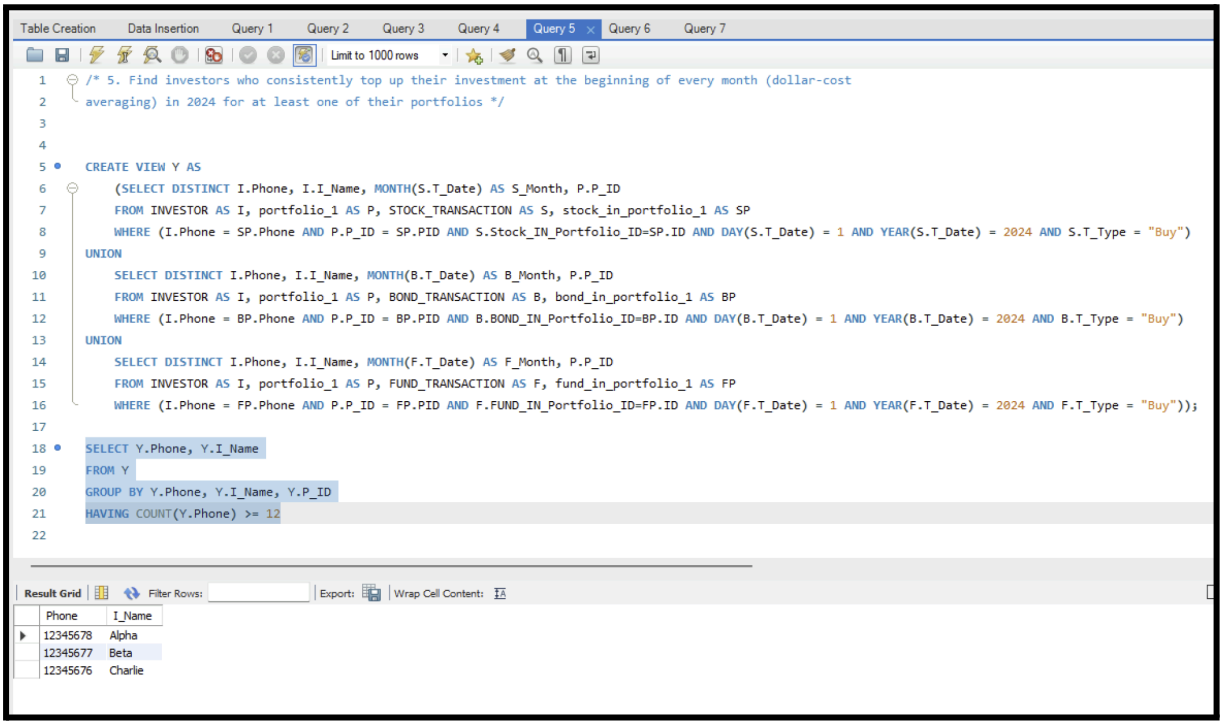


Query 5: Find investors who consistently top up their investment at the beginning of every month (dollar-cost averaging) in 2024 for at least one of their portfolios

```
CREATE VIEW Y AS
	(SELECT DISTINCT I.Phone, I.I_Name, MONTH(S.T_Date) AS S_Month, P.P_ID
	FROM INVESTOR AS I, portfolio_1 AS P, STOCK_TRANSACTION AS S,
stock_in_portfolio_1 AS SP
	WHERE (I.Phone = SP.Phone AND P.P_ID = SP.PID AND
S.Stock_IN_Portfolio_ID=SP.ID AND DAY(S.T_Date) = 1 AND YEAR(S.T_Date) = 2024
AND S.T_Type = "Buy")

UNION

	SELECT DISTINCT I.Phone, I.I_Name, MONTH(B.T_Date) AS B_Month, P.P_ID
	FROM INVESTOR AS I, portfolio_1 AS P, BOND_TRANSACTION AS B,
bond_in_portfolio_1 AS BP
	WHERE (I.Phone = BP.Phone AND P.P_ID = BP.PID AND
B.BOND_IN_Portfolio_ID=BP.ID AND DAY(B.T_Date) = 1 AND YEAR(B.T_Date) = 2024
AND B.T_Type = "Buy")

UNION

	SELECT DISTINCT I.Phone, I.I_Name, MONTH(F.T_Date) AS F_Month, P.P_ID
	FROM INVESTOR AS I, portfolio_1 AS P, FUND_TRANSACTION AS F,
fund_in_portfolio_1 AS FP
	WHERE (I.Phone = FP.Phone AND P.P_ID = FP.PID AND
F.FUND_IN_Portfolio_ID=FP.ID AND DAY(F.T_Date) = 1 AND YEAR(F.T_Date) = 2024 AND
F.T_Type = "Buy"));

SELECT Y.Phone, Y.I_Name
FROM Y
GROUP BY Y.Phone, Y.I_Name, Y.P_ID
HAVING COUNT(Y.Phone) >= 12
```

Explanation:

This query identifies investors who follow the dollar-cost averaging strategy by consistently making investment purchases on the 1st day of each month in 2024 for at least one of their portfolios. It first creates a view (Y) that compiles distinct investor details (phone number, name, portfolio ID, and transaction month) from three types of transactions—stocks, bonds, and funds—ensuring that only "Buy" transactions made on the 1st of each month in 2024 are included. The final selection groups the results by investor and portfolio ID, counting the number of qualifying transactions. Only investors with at least 12 transactions (one per month) are included in the output, listing their phone numbers and names.



Query 6: Find the most popular financial goals for investors working in the same company and whose age is between 30 to 40 years old.

```
CREATE VIEW Z AS

(SELECT G.Goal, I.Company, COUNT(G.Phone) AS GoalCount

FROM INVESTOR AS I, FINANCIAL_GOAL AS G

WHERE I.Phone = G.Phone AND YEAR(I.DOB) >=1985 AND YEAR(I.DOB) <= 1995

GROUP BY G.Goal, I.Company);


CREATE VIEW W AS

(SELECT Z.Company, MAX(Z.GoalCount) AS MaxCount

FROM Z

GROUP BY Z.Company);


SELECT DISTINCT Z.Goal, Z.Company, W.MaxCount

FROM Z, W

WHERE Z.GoalCount=W.MaxCount AND Z.Company = W.Company
```

Explanation:
First, a view of goals and company with the amount of that goal in the company was created. From that view, a subquery of goals where there are other goals in the same company with a higher count was created. Goals and Company with them not in the subquery does not have another goal count higher than it.

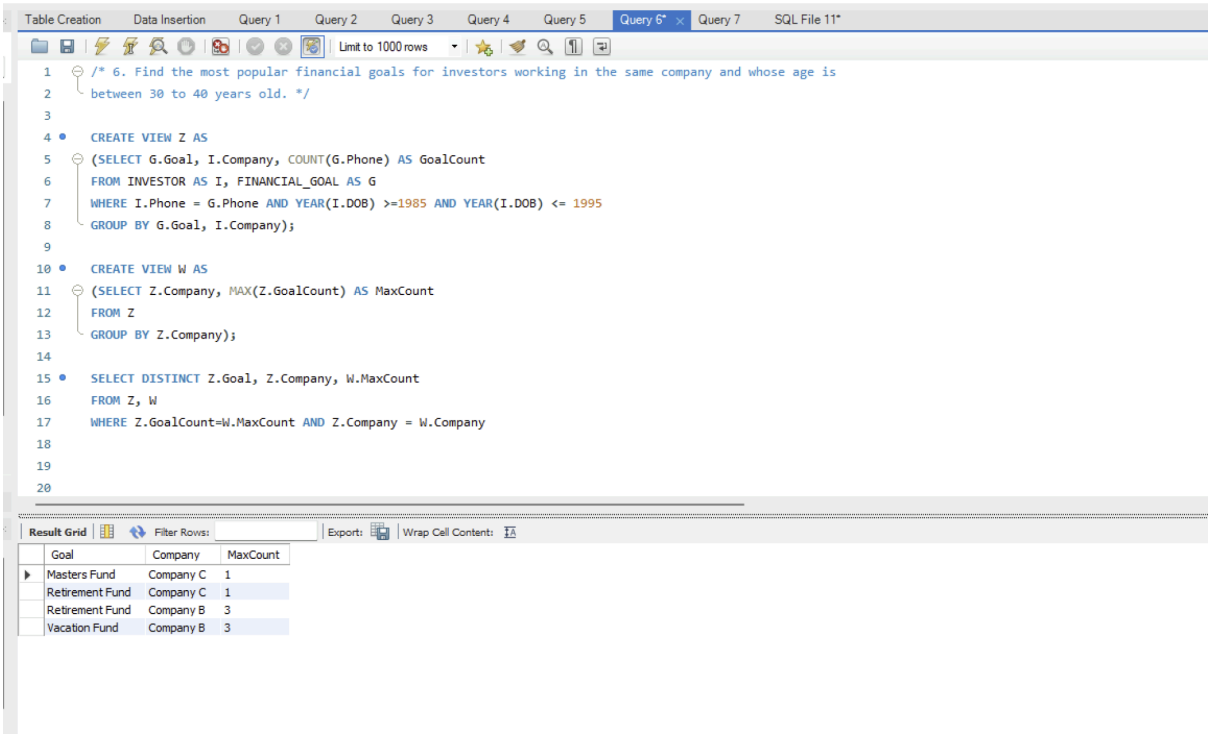


Table Creation
Data Insertion
Query 1
Query 2
Query 3
Query 4
Query 5
Query 6*
Query 7
SQL File 11*
Limit to 1000 rows
/* 6. Find the most popular financial goals for investors working in the same company and whose age is
between 30 to 40 years old. */
CREATE VIEW Z AS
(SELECT G.Goal, I.Company, COUNT(G.Phone) AS GoalCount
FROM INVESTOR AS I, FINANCIAL_GOAL AS G
WHERE I.Phone = G.Phone AND YEAR(I.DOB) >=1985 AND YEAR(I.DOB) <= 1995
GROUP BY G.Goal, I.Company);
CREATE VIEW W AS
(SELECT Z.Company, MAX(Z.GoalCount) AS MaxCount
FROM Z
GROUP BY Z.Company);
SELECT DISTINCT Z.Goal, Z.Company, W.MaxCount
FROM Z, W
WHERE Z.GoalCount=W.MaxCount AND Z.Company = W.Company
Result Grid
Filter Rows:
Export:
Wrap Cell Content:
Goal Company MaxCount
Masters Fund Company C 1
Retirement Fund Company C 1
Retirement Fund Company B 3
Vacation Fund Company B 3

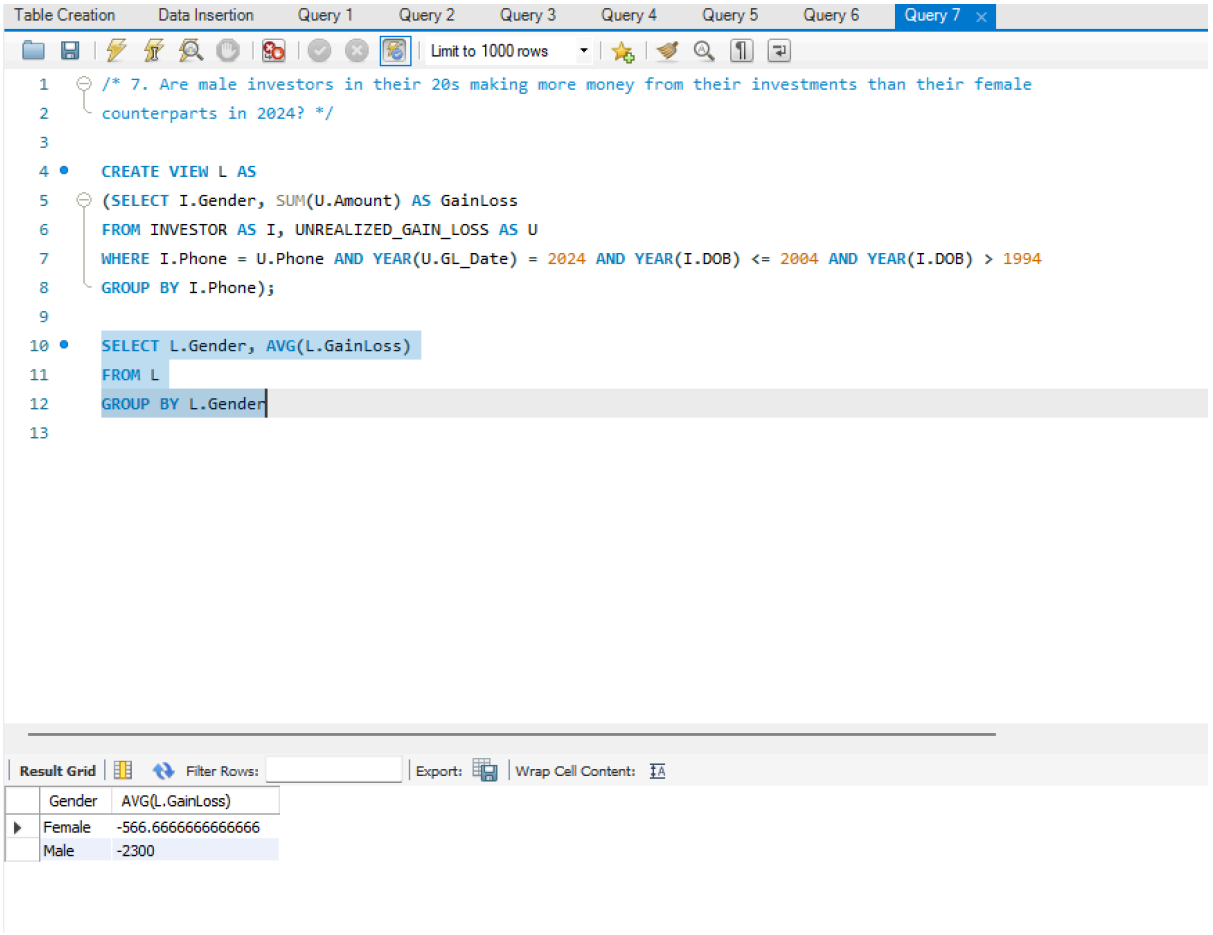
Query 7: Are male investors in their 20s making more money from their investments than their female counterparts in 2024?

```
CREATE VIEW L AS

(SELECT I.Gender, SUM(U.Amount) AS GainLoss

FROM INVESTOR AS I, UNREALIZED_GAIN_LOSS AS U

WHERE I.Phone = U.Phone AND YEAR(U.GL_Date) = 2024 AND YEAR(I.DOB) <= 2004
AND YEAR(I.DOB) > 1994

GROUP BY I.Phone);


SELECT L.Gender, AVG(L.GainLoss)

FROM L

GROUP BY L.Gender
```

Explanation:

The query first creates a view L, which calculates the total gain or loss (GainLoss) for each investor born between 1995 and 2004 (i.e., investors in their 20s) by summing their investment gains/losses from UNREALIZED_GAIN_LOSS in 2024. It groups results by investor Phone to ensure each investor's total gain/loss is calculated. The second query then calculates the average gain/loss per gender by grouping by Gender.

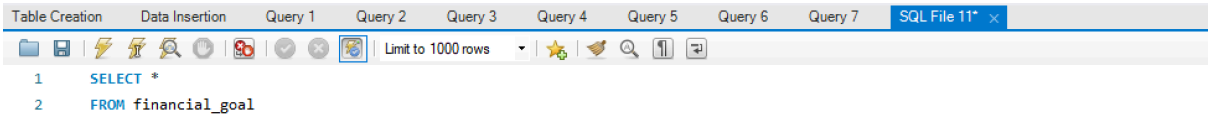
The output will show two rows: one for male and one for female investors in their 20s, displaying the average investment gain/loss for each group.

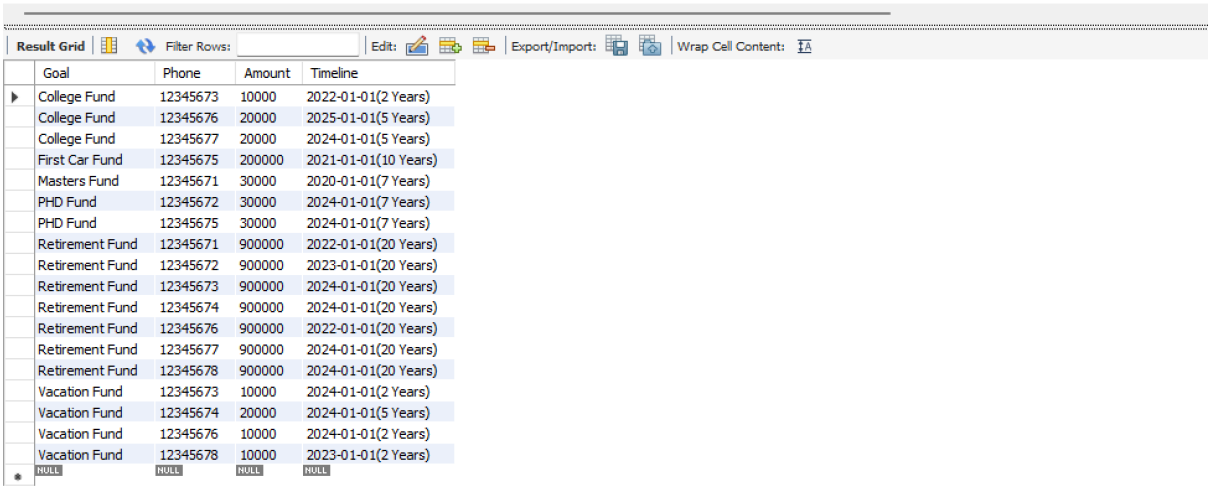


No, male investors in their 20s are not making more money than their female counterparts in 2024. The output shows that male investors had an average loss of -2300, while female investors had an average loss of -566.67. Since both groups experienced losses, but males lost more on average, this suggests that female investors performed better financially in 2024.

Printout of all table records:

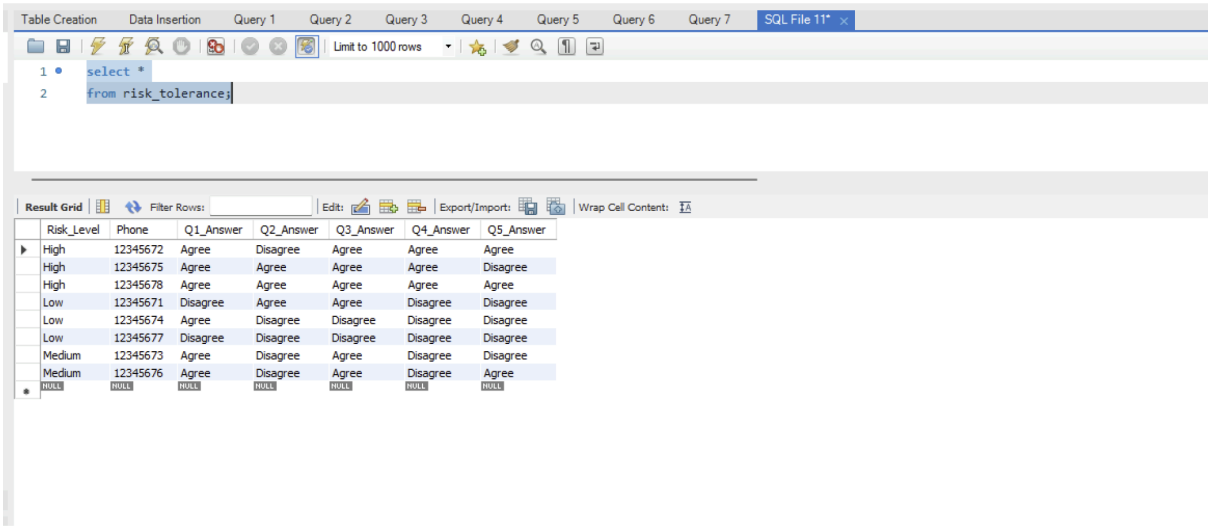
FINANCIAL_GOAL





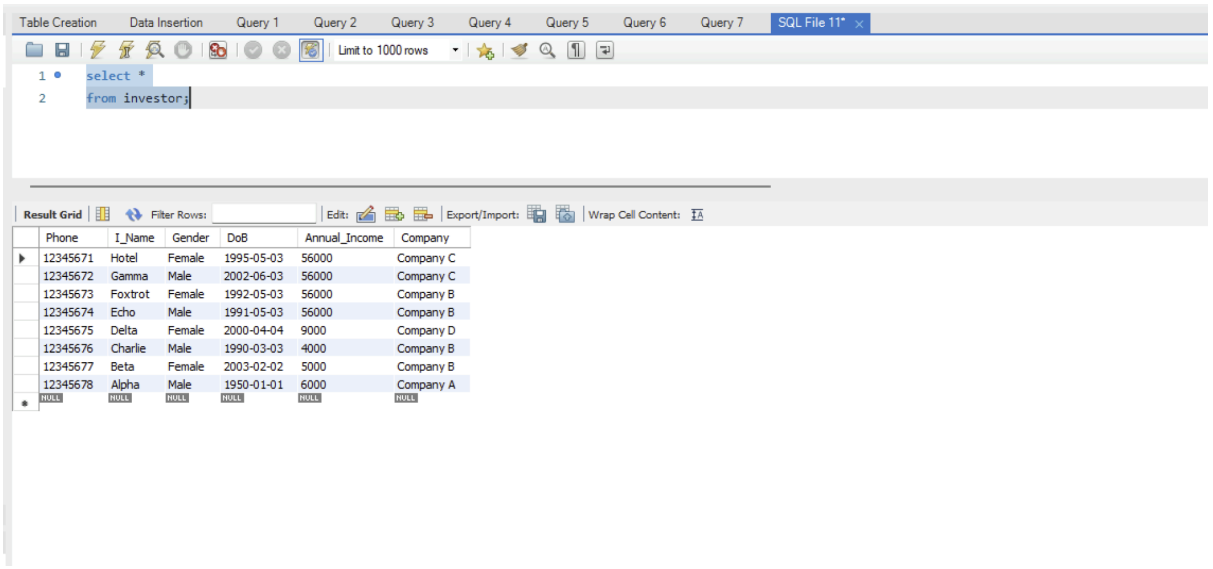
Goal	Phone	Amount	Timeline
College Fund	12345673	10000	2022-01-01(2 Years)
College Fund	12345676	20000	2025-01-01(5 Years)
College Fund	12345677	20000	2024-01-01(5 Years)
First Car Fund	12345675	200000	2021-01-01(10 Years)
Masters Fund	12345671	30000	2020-01-01(7 Years)
PHD Fund	12345672	30000	2024-01-01(7 Years)
PHD Fund	12345675	30000	2024-01-01(7 Years)
Retirement Fund	12345671	900000	2022-01-01(20 Years)
Retirement Fund	12345672	900000	2023-01-01(20 Years)
Retirement Fund	12345673	900000	2024-01-01(20 Years)
Retirement Fund	12345674	900000	2024-01-01(20 Years)
Retirement Fund	12345676	900000	2022-01-01(20 Years)
Retirement Fund	12345677	900000	2024-01-01(20 Years)
Retirement Fund	12345678	900000	2024-01-01(20 Years)
Vacation Fund	12345673	10000	2024-01-01(2 Years)
Vacation Fund	12345674	20000	2024-01-01(5 Years)
Vacation Fund	12345676	10000	2024-01-01(2 Years)
Vacation Fund	12345678	10000	2023-01-01(2 Years)
NULL	NULL	NULL	NULL

RISK_TOLERANCE



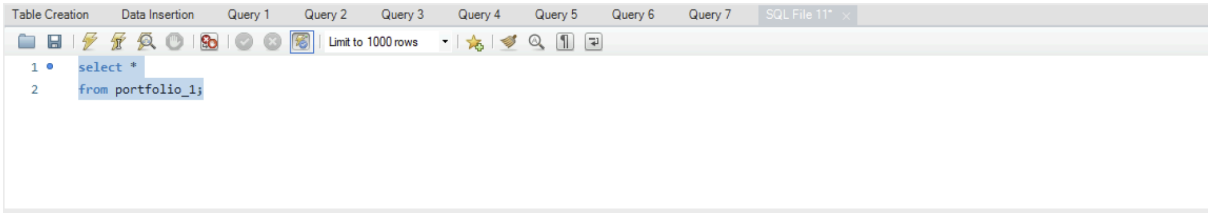
Risk_Level	Phone	Q1_Answer	Q2_Answer	Q3_Answer	Q4_Answer	Q5_Answer
High	12345672	Agree	Disagree	Agree	Agree	Agree
High	12345675	Agree	Agree	Agree	Agree	Disagree
High	12345678	Agree	Agree	Agree	Agree	Agree
Low	12345671	Disagree	Agree	Agree	Disagree	Disagree
Low	12345674	Agree	Disagree	Disagree	Disagree	Disagree
Low	12345677	Disagree	Disagree	Disagree	Disagree	Disagree
Medium	12345673	Agree	Disagree	Agree	Disagree	Disagree
Medium	12345676	Agree	Disagree	Agree	Disagree	Agree
NULL	NULL	NULL	NULL	NULL	NULL	NULL

INVESTOR



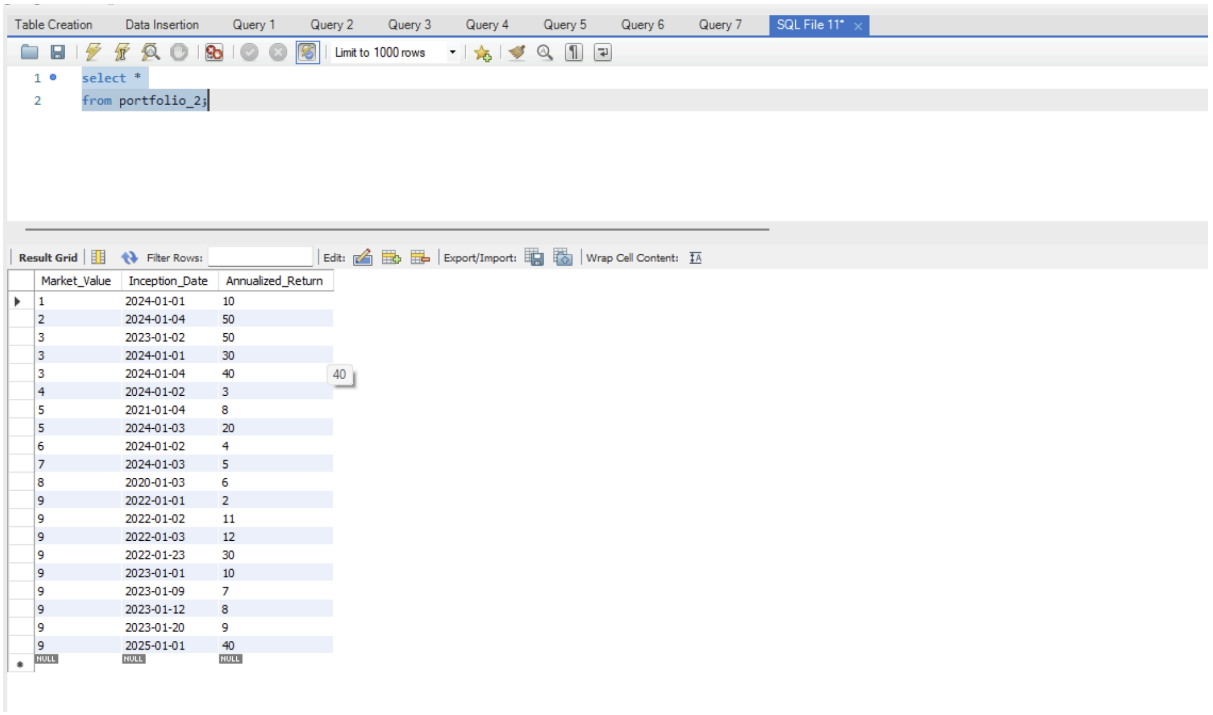
Phone	I_Name	Gender	DoB	Annual_Income	Company
12345671	Hotel	Female	1995-05-03	56000	Company C
12345672	Gamma	Male	2002-06-03	56000	Company C
12345673	Foxtrot	Female	1992-05-03	56000	Company B
12345674	Echo	Male	1991-05-03	56000	Company B
12345675	Delta	Female	2000-04-04	9000	Company D
12345676	Charlie	Male	1990-03-03	4000	Company B
12345677	Beta	Female	2003-02-02	5000	Company B
12345678	Alpha	Male	1950-01-01	6000	Company A
NULL	NULL	NULL	NULL	NULL	NULL

PORTFOLIO_1



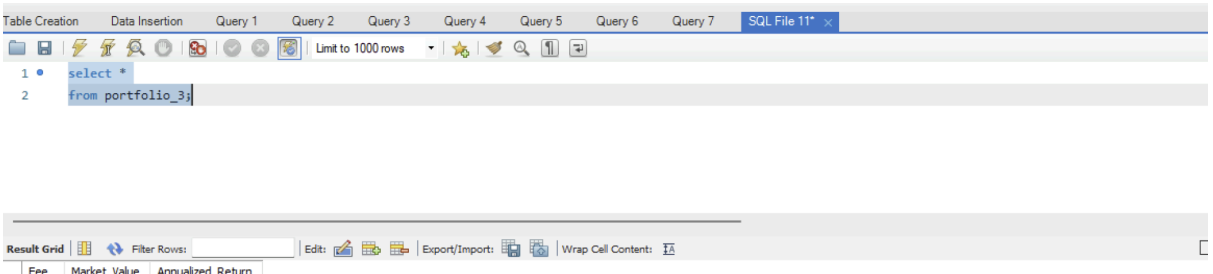
P_ID	Phone	Market_Value	Inception_Date
11	12345678	1	2024-01-01
12	12345678	3	2024-01-01
21	12345677	9	2025-01-01
22	12345677	9	2023-01-01
31	12345676	9	2022-01-01
32	12345676	4	2024-01-02
41	12345675	6	2024-01-02
42	12345675	3	2023-01-02
51	12345674	9	2023-01-20
52	12345674	9	2022-01-02
61	12345673	5	2024-01-03
62	12345673	7	2024-01-03
71	12345672	8	2020-01-03
72	12345672	9	2023-01-09
73	12345672	9	2022-01-03
74	12345672	3	2024-01-04
81	12345671	2	2024-01-04
82	12345671	5	2021-01-04
83	12345671	9	2023-01-12
84	12345671	9	2022-01-23
NULL	NULL	NULL	NULL

PORTFOLIO_2



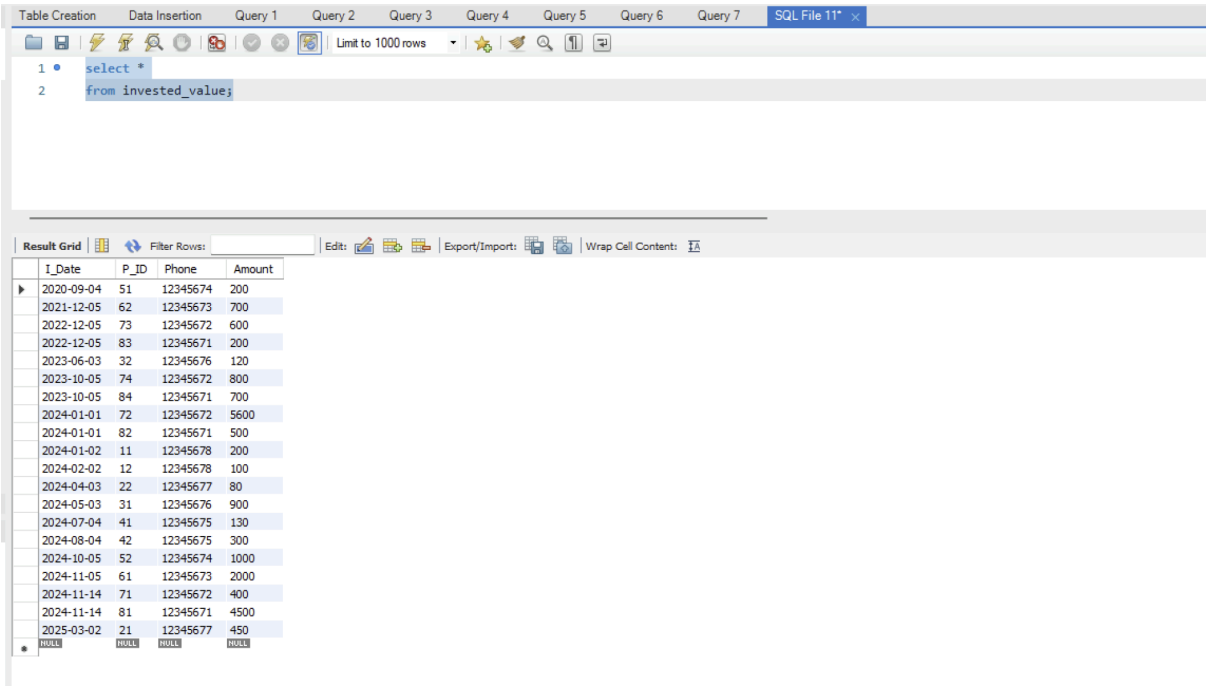
Market_Value	Inception_Date	Annualized_Return
1	2024-01-01	10
2	2024-01-04	50
3	2023-01-02	50
3	2024-01-01	30
3	2024-01-04	40
4	2024-01-02	3
5	2021-01-04	8
5	2024-01-03	20
6	2024-01-02	4
7	2024-01-03	5
8	2020-01-03	6
9	2022-01-01	2
9	2022-01-02	11
9	2022-01-03	12
9	2022-01-23	30
9	2023-01-01	10
9	2023-01-09	7
9	2023-01-12	8
9	2023-01-20	9
9	2025-01-01	40
NULL	NULL	NULL

PORTFOLIO_3



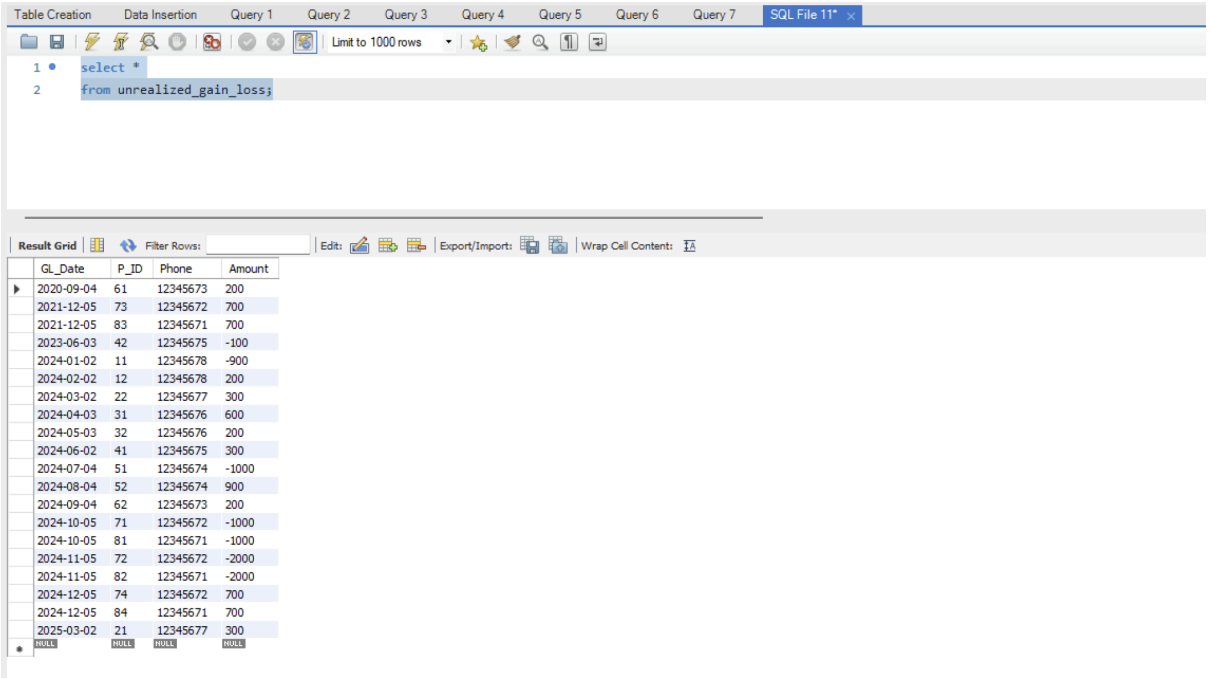
Fee	Market_Value	Annualized_Return
10	1	10
50	2	50
12	3	30
41	3	40
23	3	50
1000	4	3
44	5	8
15	5	20
45	6	4
17	7	5
18	8	6
420	9	2
78	9	3
20	9	7
67	9	8
11	9	9
69	9	10
14	9	11
30	9	12
100	9	40
NULL	NULL	NULL

INVESTED_VALUE



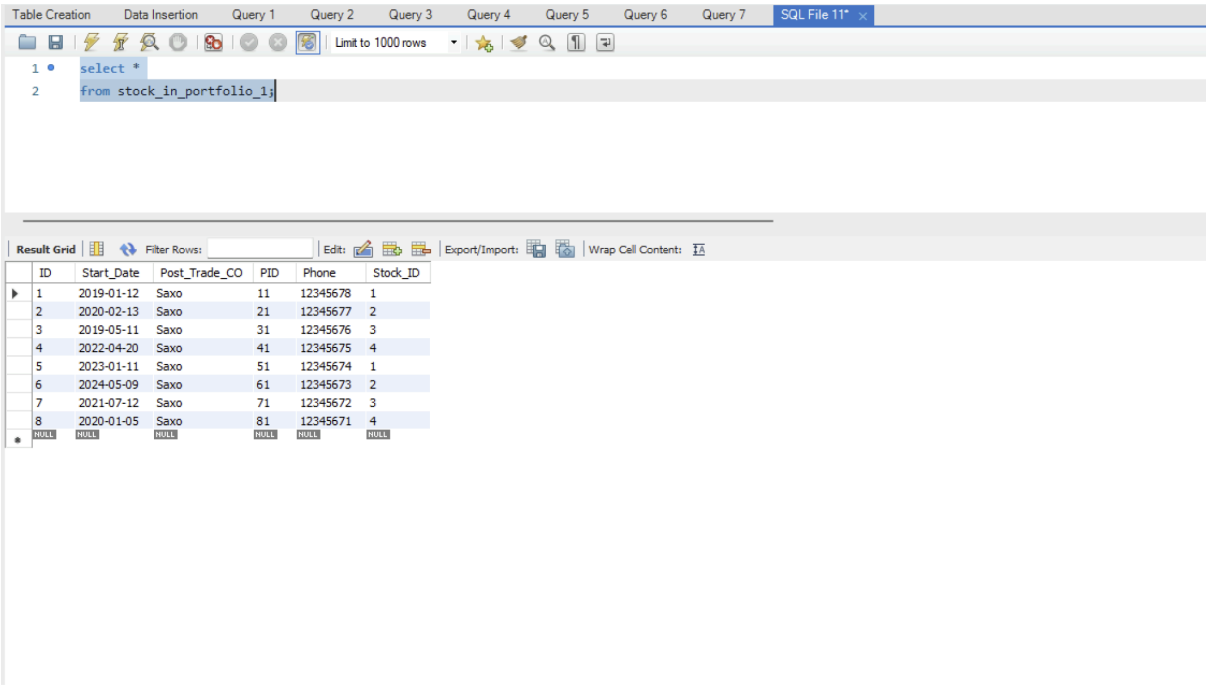
I_Date	P_ID	Phone	Amount
2020-09-04	51	12345674	200
2021-12-05	62	12345673	700
2022-12-05	73	12345672	600
2022-12-05	83	12345671	200
2023-06-03	32	12345676	120
2023-10-05	74	12345672	800
2023-10-05	84	12345671	700
2024-01-01	72	12345672	5600
2024-01-01	82	12345671	500
2024-01-02	11	12345678	200
2024-02-02	12	12345678	100
2024-04-03	22	12345677	80
2024-05-03	31	12345676	900
2024-07-04	41	12345675	130
2024-08-04	42	12345675	300
2024-10-05	52	12345674	1000
2024-11-05	61	12345673	2000
2024-11-14	71	12345672	400
2024-11-14	81	12345671	4500
2025-03-02	21	12345677	450
NULL	NULL	NULL	NULL

UNREALIZED_GAIN_LOSS



GL_Date	P_ID	Phone	Amount
2020-09-04	61	12345673	200
2021-12-05	73	12345672	700
2021-12-05	83	12345671	700
2023-06-03	42	12345675	-100
2024-01-02	11	12345678	-900
2024-02-02	12	12345678	200
2024-03-02	22	12345677	300
2024-04-03	31	12345676	600
2024-05-03	32	12345676	200
2024-06-02	41	12345675	300
2024-07-04	51	12345674	-1000
2024-08-04	52	12345674	900
2024-09-04	62	12345673	200
2024-10-05	71	12345672	-1000
2024-10-05	81	12345671	-1000
2024-11-05	72	12345672	-2000
2024-11-05	82	12345671	-2000
2024-12-05	74	12345672	700
2024-12-05	84	12345671	700
2025-03-02	21	12345677	300
NULL	NULL	NULL	NULL

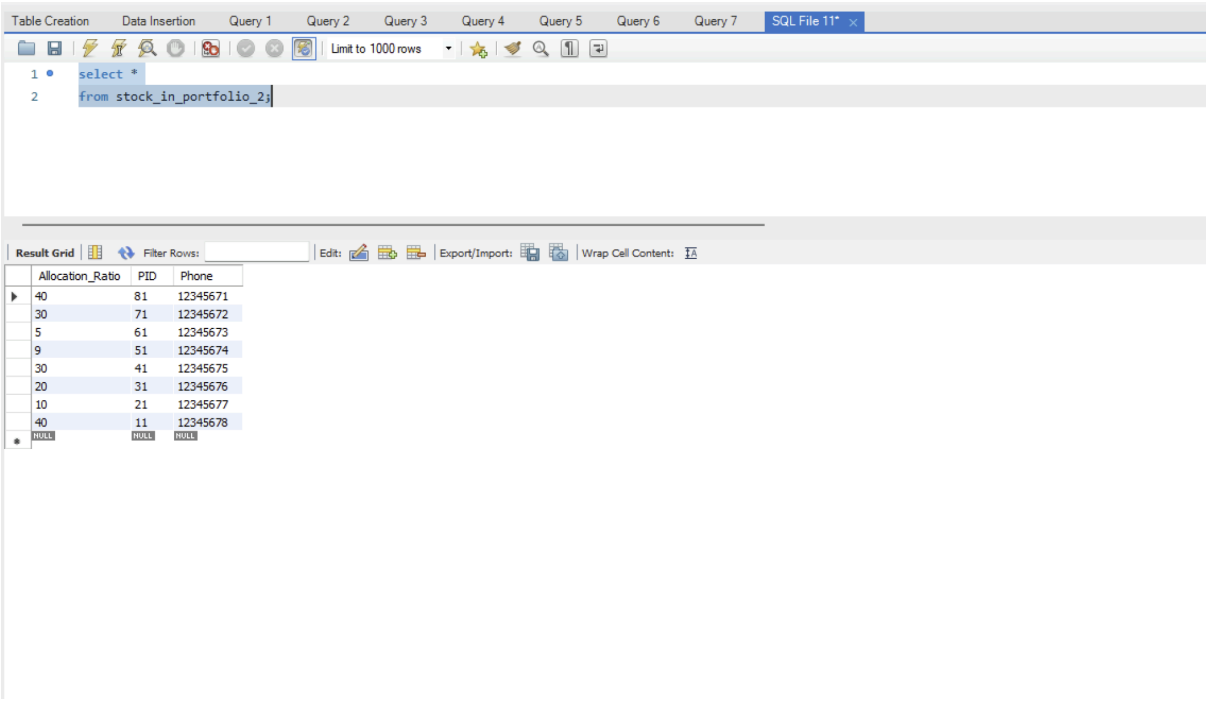
STOCK_IN_PORTFOLIO_1



```
select *
from stock_in_portfolio_1;
```

ID	Start_Date	Post_Trade_CO	PID	Phone	Stock_ID
1	2019-01-12	Saxo	11	12345678	1
2	2020-02-13	Saxo	21	12345677	2
3	2019-05-11	Saxo	31	12345676	3
4	2022-04-20	Saxo	41	12345675	4
5	2023-01-11	Saxo	51	12345674	1
6	2024-05-09	Saxo	61	12345673	2
7	2021-07-12	Saxo	71	12345672	3
8	2020-01-05	Saxo	81	12345671	4

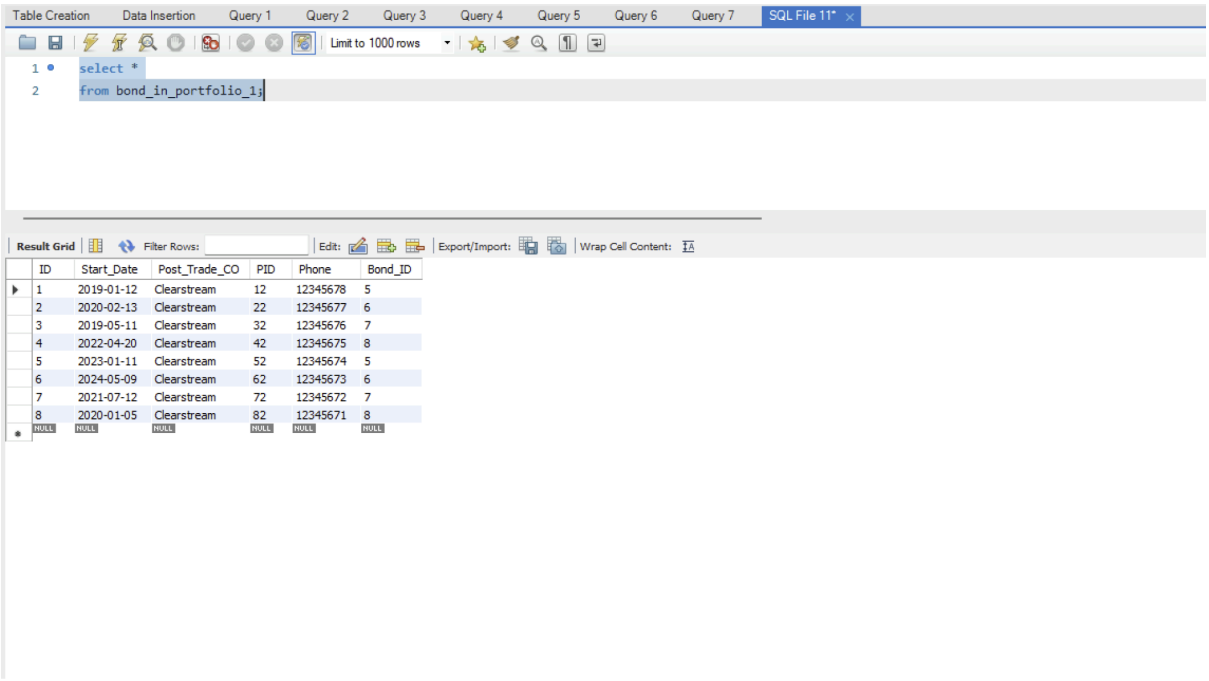
STOCK_IN_PORTFOLIO_2



```
select *
from stock_in_portfolio_2;
```

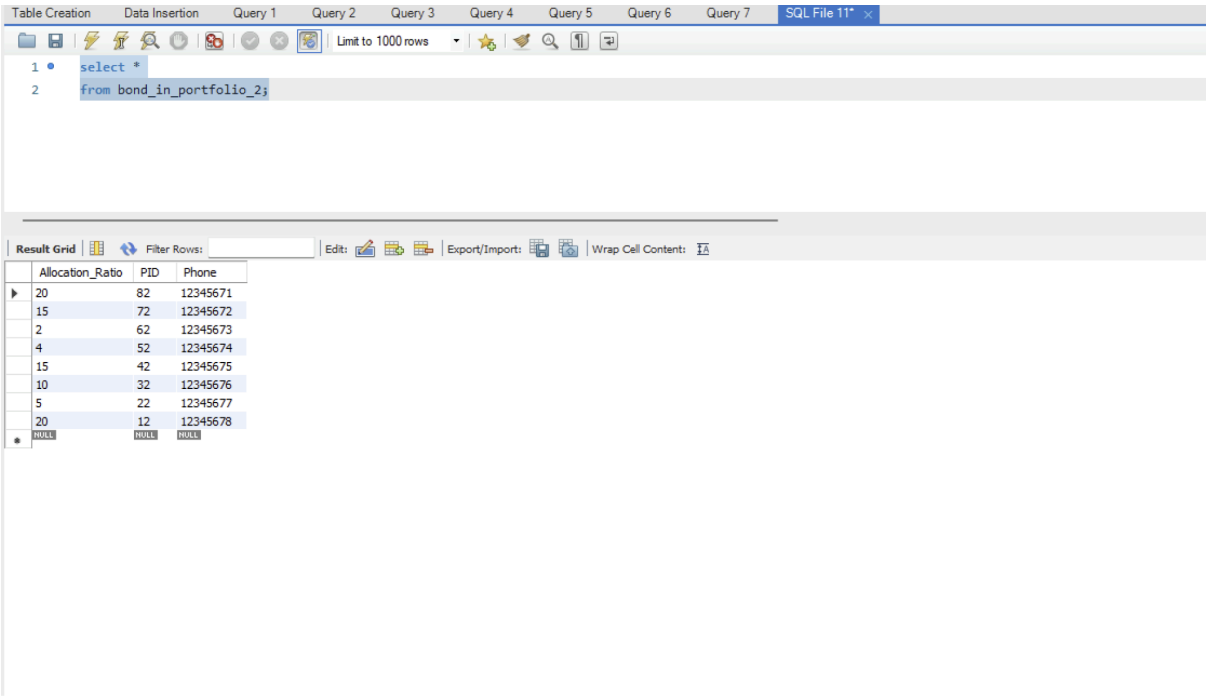
Allocation_Ratio	PID	Phone
40	81	12345671
30	71	12345672
5	61	12345673
9	51	12345674
30	41	12345675
20	31	12345676
10	21	12345677
40	11	12345678

BOND_IN_PORTFOLIO_1



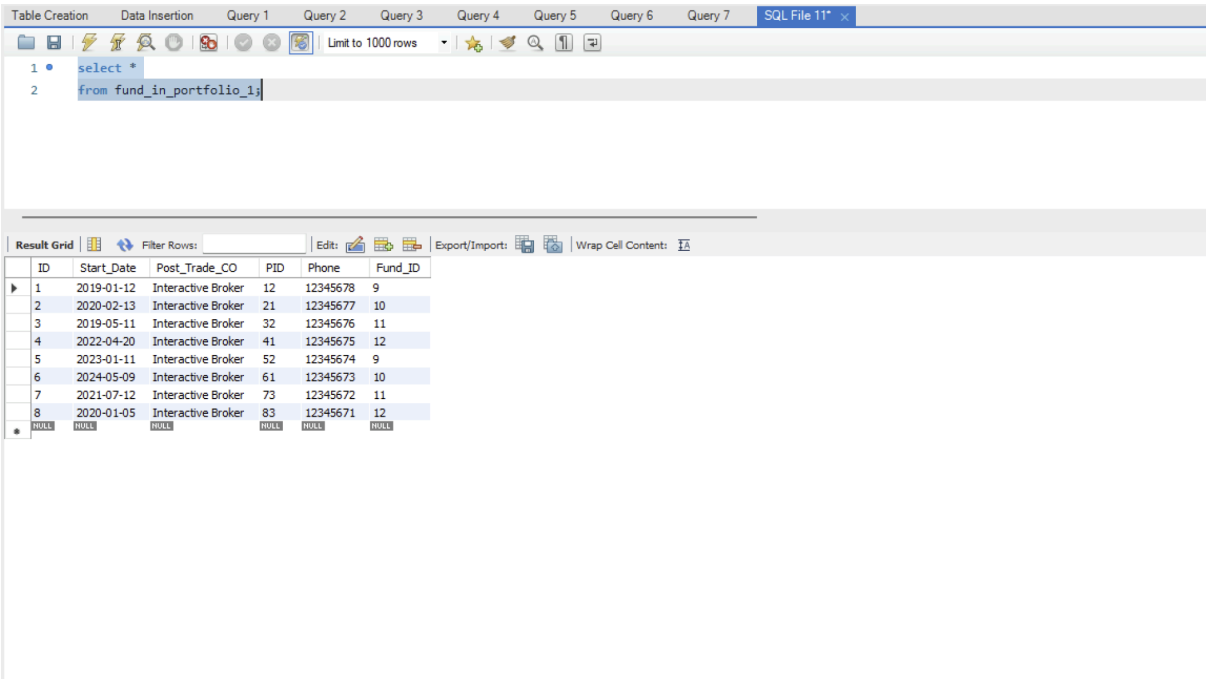
ID	Start_Date	Post_Trade_CO	PID	Phone	Bond_ID
1	2019-01-12	Clearstream	12	12345678	5
2	2020-02-13	Clearstream	22	12345677	6
3	2019-05-11	Clearstream	32	12345676	7
4	2022-04-20	Clearstream	42	12345675	8
5	2023-01-11	Clearstream	52	12345674	5
6	2024-05-09	Clearstream	62	12345673	6
7	2021-07-12	Clearstream	72	12345672	7
8	2020-01-05	Clearstream	82	12345671	8
NULL	NULL	NULL	NULL	NULL	NULL

BOND_IN_PORTFOLIO_2



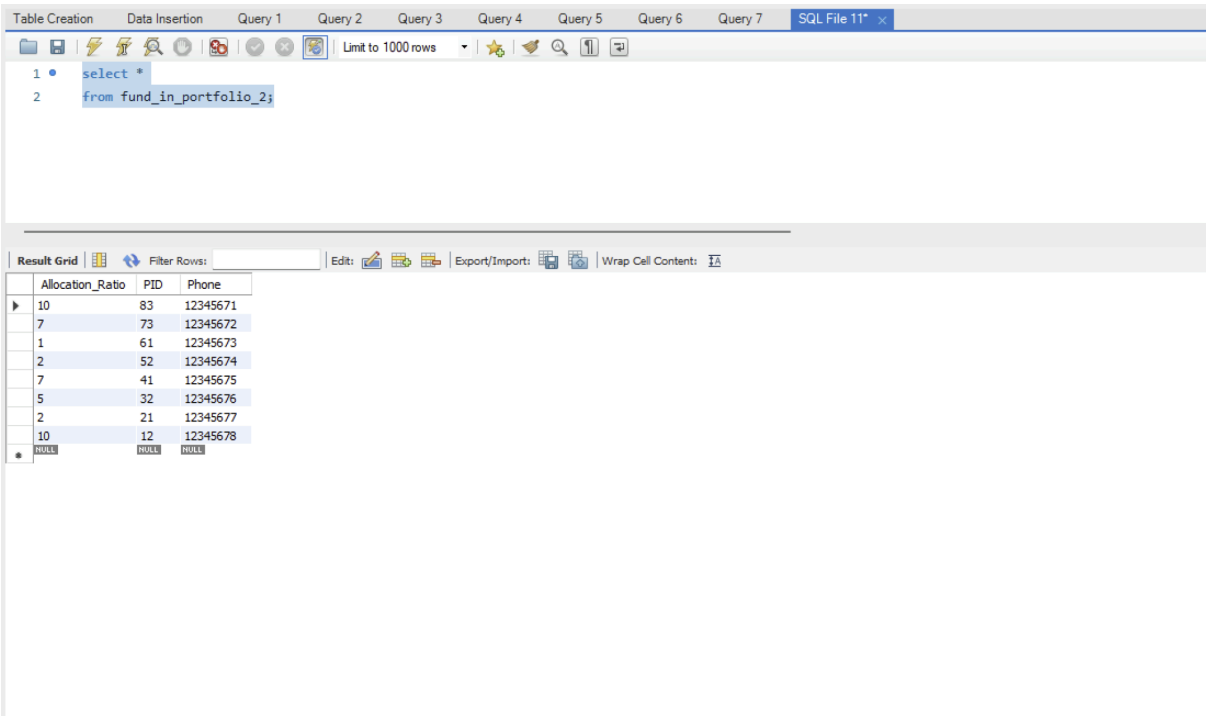
Allocation_Ratio	PID	Phone
20	82	12345671
15	72	12345672
2	62	12345673
4	52	12345674
15	42	12345675
10	32	12345676
5	22	12345677
20	12	12345678
NULL	NULL	NULL

FUND_IN_PORTFOLIO_1



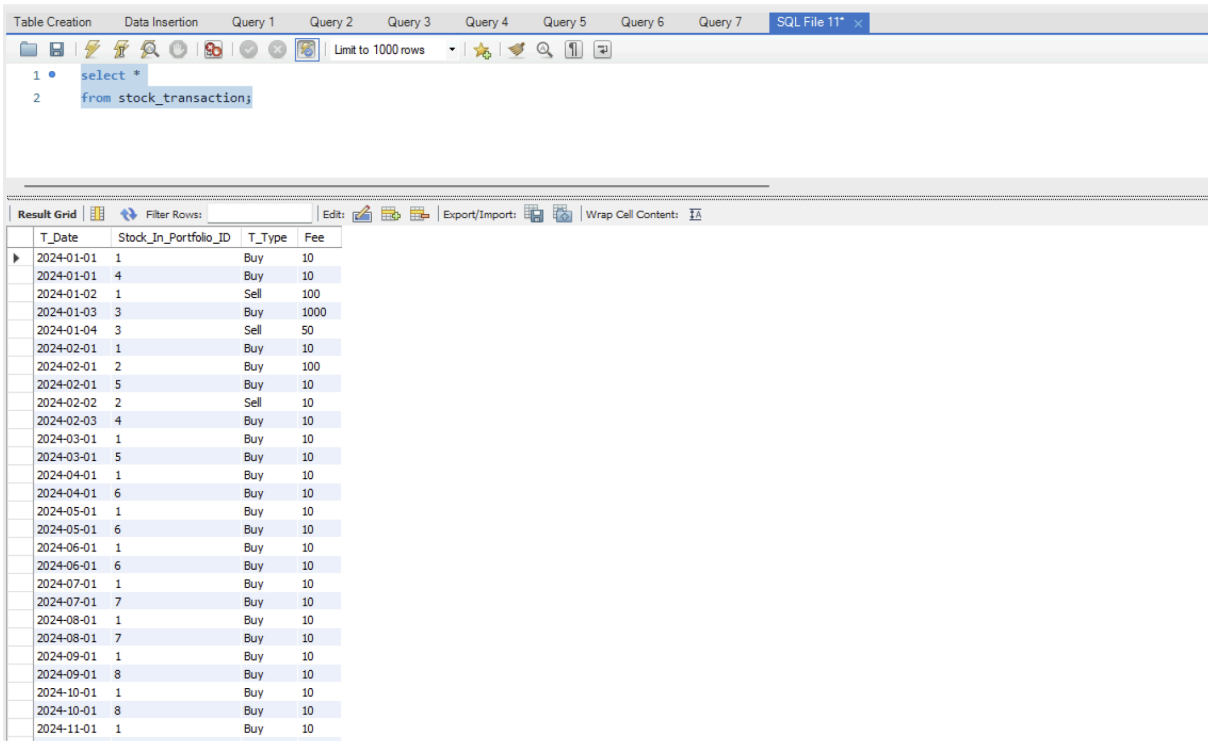
ID	Start_Date	Post_Trade_CO	PID	Phone	Fund_ID
1	2019-01-12	Interactive Broker	12	12345678	9
2	2020-02-13	Interactive Broker	21	12345677	10
3	2019-05-11	Interactive Broker	32	12345676	11
4	2022-04-20	Interactive Broker	41	12345675	12
5	2023-01-11	Interactive Broker	52	12345674	9
6	2024-05-09	Interactive Broker	61	12345673	10
7	2021-07-12	Interactive Broker	73	12345672	11
8	2020-01-05	Interactive Broker	83	12345671	12
NULL	NULL	NULL	NULL	NULL	NULL

FUND_IN_PORTFOLIO_2



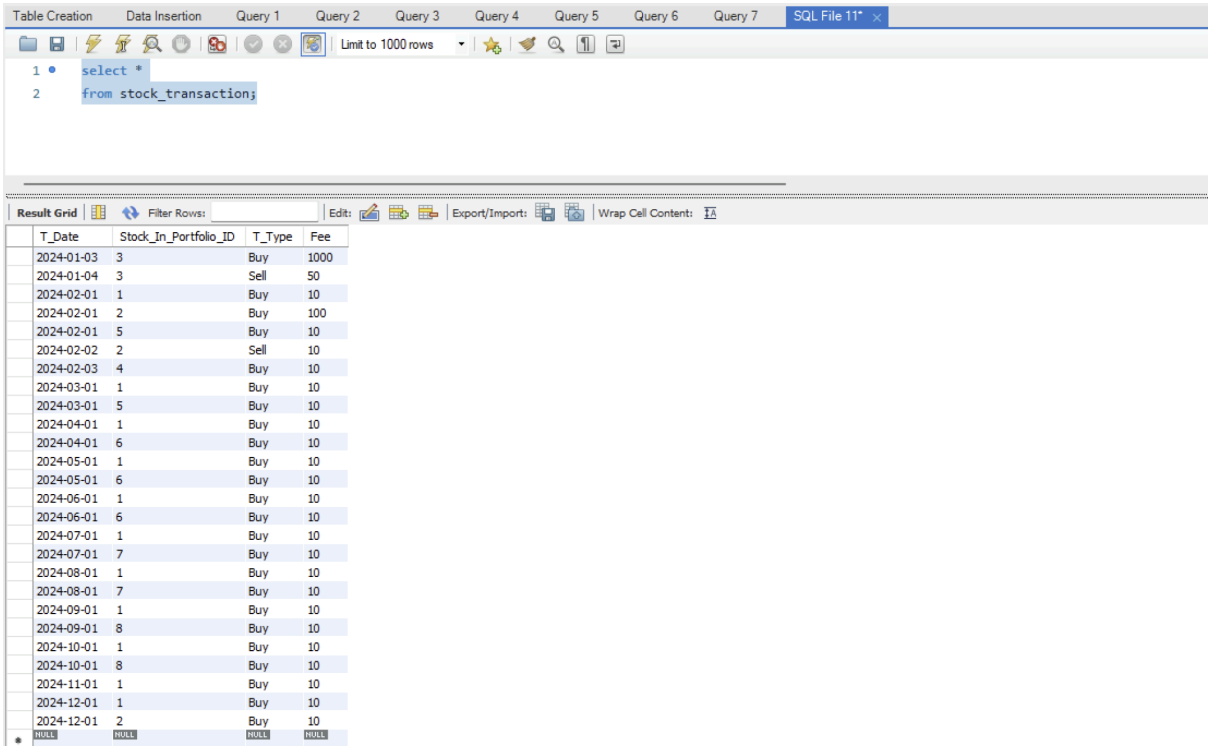
Allocation_Ratio	PID	Phone
10	83	12345671
7	73	12345672
1	61	12345673
2	52	12345674
7	41	12345675
5	32	12345676
2	21	12345677
10	12	12345678
NULL	NULL	NULL

STOCK_TRANSACTION



```
select *
from stock_transaction;
```

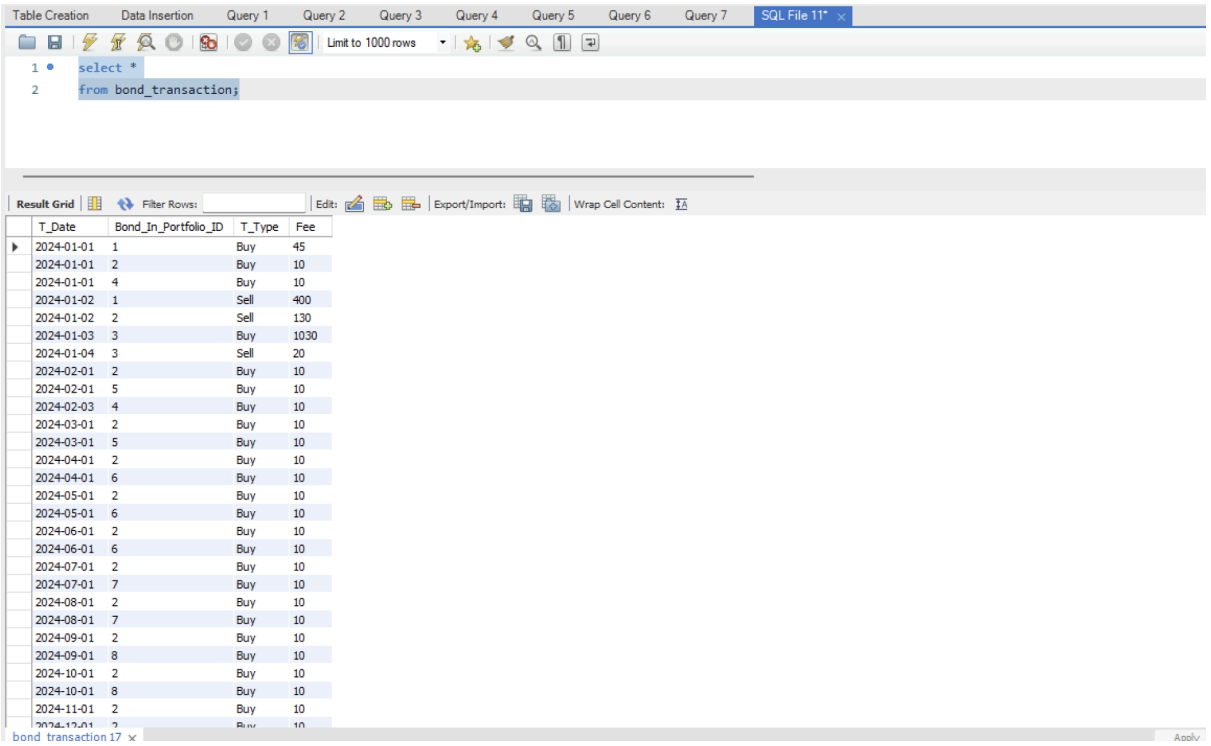
T_Date	Stock_In_Portfolio_ID	T_Type	Fee
2024-01-01	1	Buy	10
2024-01-01	4	Buy	10
2024-01-02	1	Sell	100
2024-01-03	3	Buy	1000
2024-01-04	3	Sell	50
2024-02-01	1	Buy	10
2024-02-01	2	Buy	100
2024-02-01	5	Buy	10
2024-02-02	2	Sell	10
2024-02-03	4	Buy	10
2024-03-01	1	Buy	10
2024-03-01	5	Buy	10
2024-04-01	1	Buy	10
2024-04-01	6	Buy	10
2024-05-01	1	Buy	10
2024-05-01	6	Buy	10
2024-06-01	1	Buy	10
2024-06-01	6	Buy	10
2024-07-01	1	Buy	10
2024-07-01	7	Buy	10
2024-08-01	1	Buy	10
2024-08-01	7	Buy	10
2024-09-01	1	Buy	10
2024-09-01	8	Buy	10
2024-10-01	1	Buy	10
2024-10-01	8	Buy	10
2024-11-01	1	Buy	10

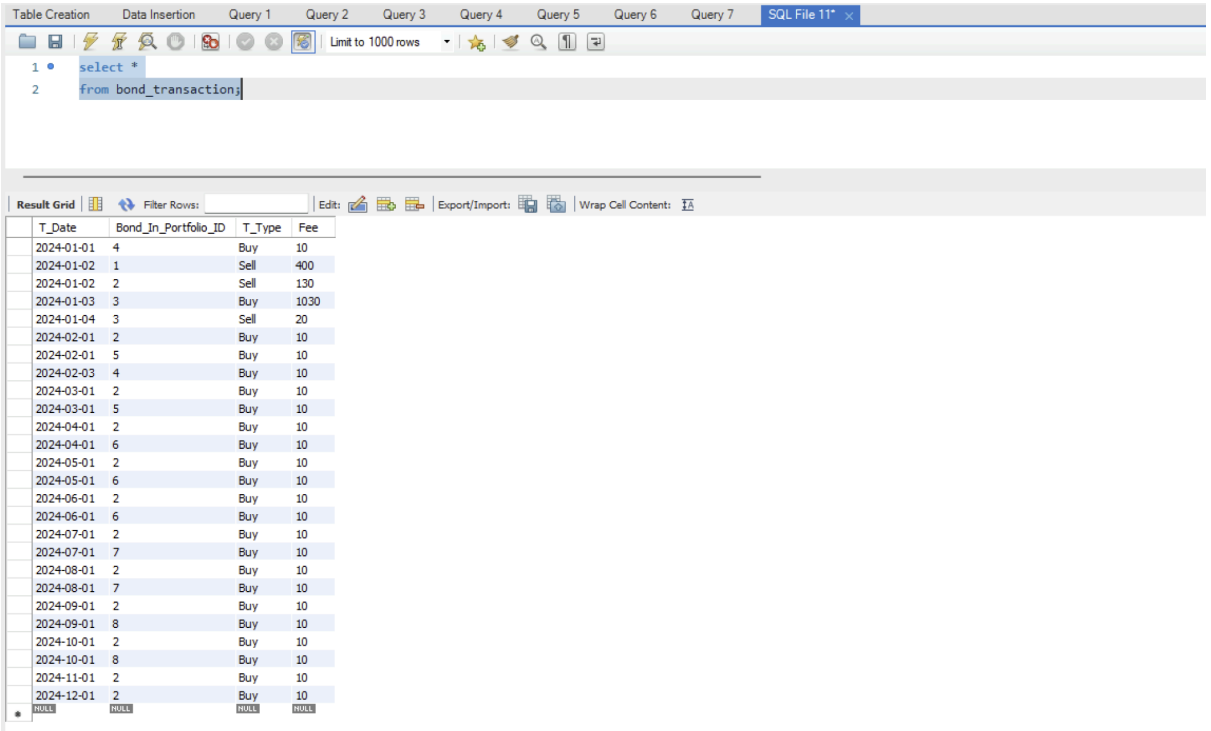


```
select *
from stock_transaction;
```

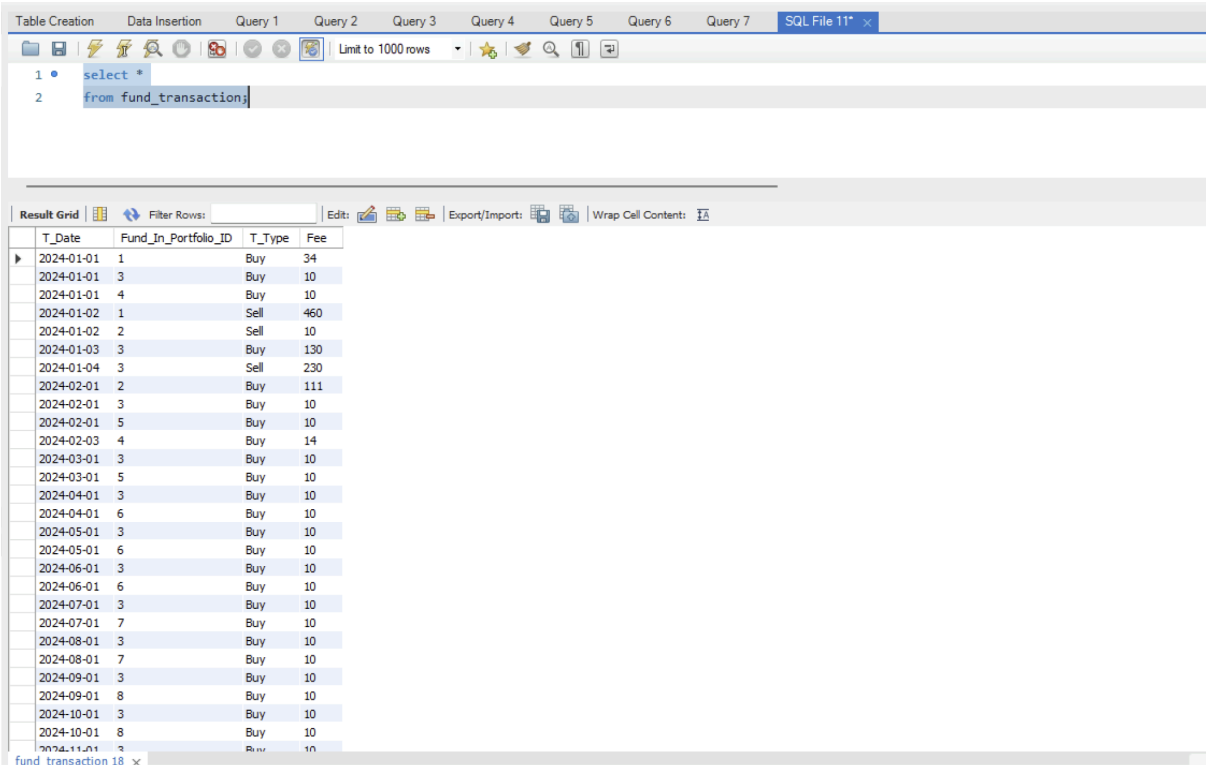
T_Date	Stock_In_Portfolio_ID	T_Type	Fee
2024-01-03	3	Buy	1000
2024-01-04	3	Sell	50
2024-02-01	1	Buy	10
2024-02-01	2	Buy	100
2024-02-01	5	Buy	10
2024-02-02	2	Sell	10
2024-02-03	4	Buy	10
2024-03-01	1	Buy	10
2024-03-01	5	Buy	10
2024-04-01	1	Buy	10
2024-04-01	6	Buy	10
2024-05-01	1	Buy	10
2024-05-01	6	Buy	10
2024-06-01	1	Buy	10
2024-06-01	6	Buy	10
2024-07-01	1	Buy	10
2024-07-01	7	Buy	10
2024-08-01	1	Buy	10
2024-08-01	7	Buy	10
2024-09-01	1	Buy	10
2024-09-01	8	Buy	10
2024-10-01	1	Buy	10
2024-10-01	8	Buy	10
2024-11-01	1	Buy	10
2024-12-01	1	Buy	10
2024-12-01	2	Buy	10
NULL	NULL	NULL	NULL

BOND_TRANSACTION

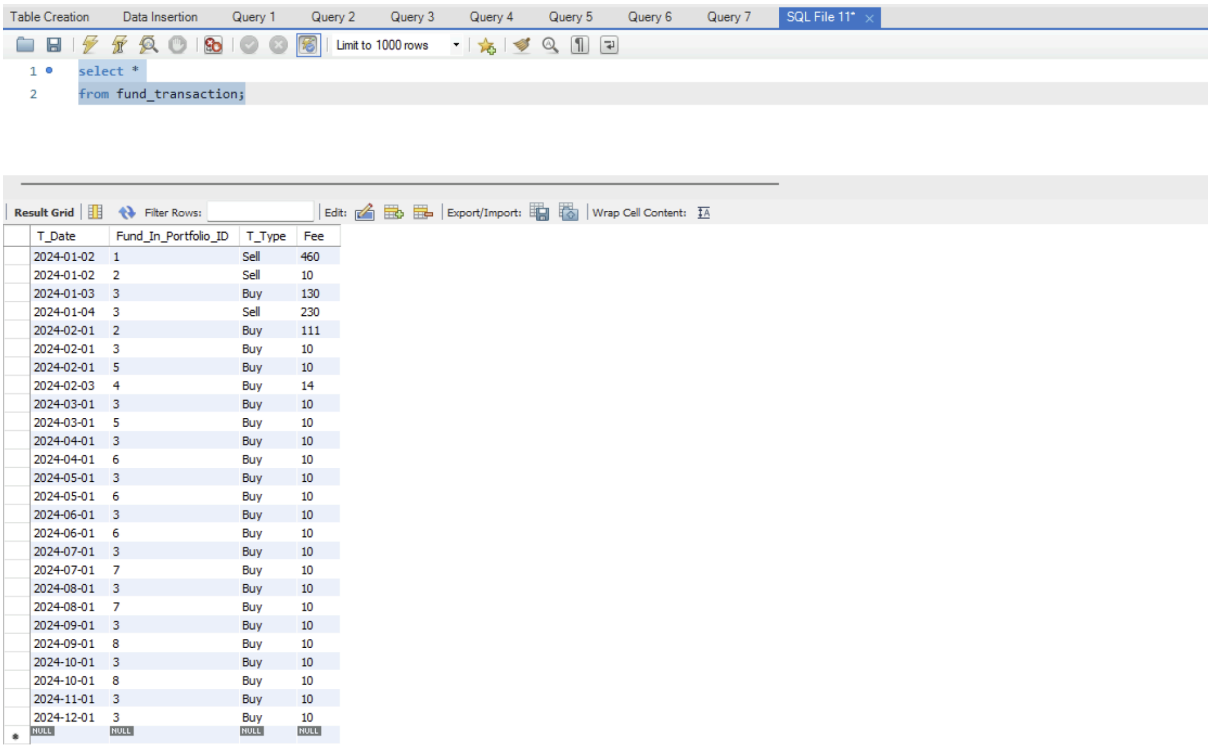




FUND_TRANSACTION



T_Date	Fund_In_Portfolio_ID	T_Type	Fee
2024-01-01	1	Buy	34
2024-01-01	3	Buy	10
2024-01-01	4	Buy	10
2024-01-02	1	Sell	460
2024-01-02	2	Sell	10
2024-01-03	3	Buy	130
2024-01-04	3	Sell	230
2024-02-01	2	Buy	111
2024-02-01	3	Buy	10
2024-02-01	5	Buy	10
2024-02-03	4	Buy	14
2024-03-01	3	Buy	10
2024-03-01	5	Buy	10
2024-04-01	3	Buy	10
2024-04-01	6	Buy	10
2024-05-01	3	Buy	10
2024-05-01	6	Buy	10
2024-06-01	3	Buy	10
2024-06-01	6	Buy	10
2024-07-01	3	Buy	10
2024-07-01	7	Buy	10
2024-08-01	3	Buy	10
2024-08-01	7	Buy	10
2024-09-01	3	Buy	10
2024-09-01	8	Buy	10
2024-10-01	3	Buy	10
2024-10-01	8	Buy	10



T_Date	Fund_In_Portfolio_ID	T_Type	Fee
2024-01-02	1	Sell	460
2024-01-02	2	Sell	10
2024-01-03	3	Buy	130
2024-01-04	3	Sell	230
2024-02-01	2	Buy	111
2024-02-01	3	Buy	10
2024-02-01	5	Buy	10
2024-02-03	4	Buy	14
2024-03-01	3	Buy	10
2024-03-01	5	Buy	10
2024-04-01	3	Buy	10
2024-04-01	6	Buy	10
2024-05-01	3	Buy	10
2024-05-01	6	Buy	10
2024-06-01	3	Buy	10
2024-06-01	6	Buy	10
2024-07-01	3	Buy	10
2024-07-01	7	Buy	10
2024-08-01	3	Buy	10
2024-08-01	7	Buy	10
2024-09-01	3	Buy	10
2024-09-01	8	Buy	10
2024-10-01	3	Buy	10
2024-10-01	8	Buy	10
2024-11-01	3	Buy	10
2024-12-01	3	Buy	10
NULL	NULL	NULL	NULL

ASSET

Table Creation | Data Insertion | Query 1 | Query 2 | Query 3 | Query 4 | Query 5 | Query 6 | Query 7 | SQL File 11*

Limit to 1000 rows

```
1  select *
2  from asset;
```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content:

ID	A_Name	Price
1	Asset 1	120
10	Asset 10	20
11	Asset 11	30
12	Asset 12	12
2	Asset 2	30
3	Asset 3	10
4	Asset 4	220
5	Asset 5	140
6	Asset 6	320
7	Asset 7	620
8	Asset 8	230
9	Asset 9	670
NULL	NULL	NULL

STOCK

Table Creation | Data Insertion | Query 1 | Query 2 | Query 3 | Query 4 | Query 5 | Query 6 | Query 7 | SQL File 11*

Limit to 1000 rows

```
1  select *
2  from stock;
```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content:

ID	P_E_Ratio	EPS	EBITDA
1	10	10	10
2	20	20	20
3	30	30	30
4	40	40	40
NULL	NULL	NULL	NULL

BOND

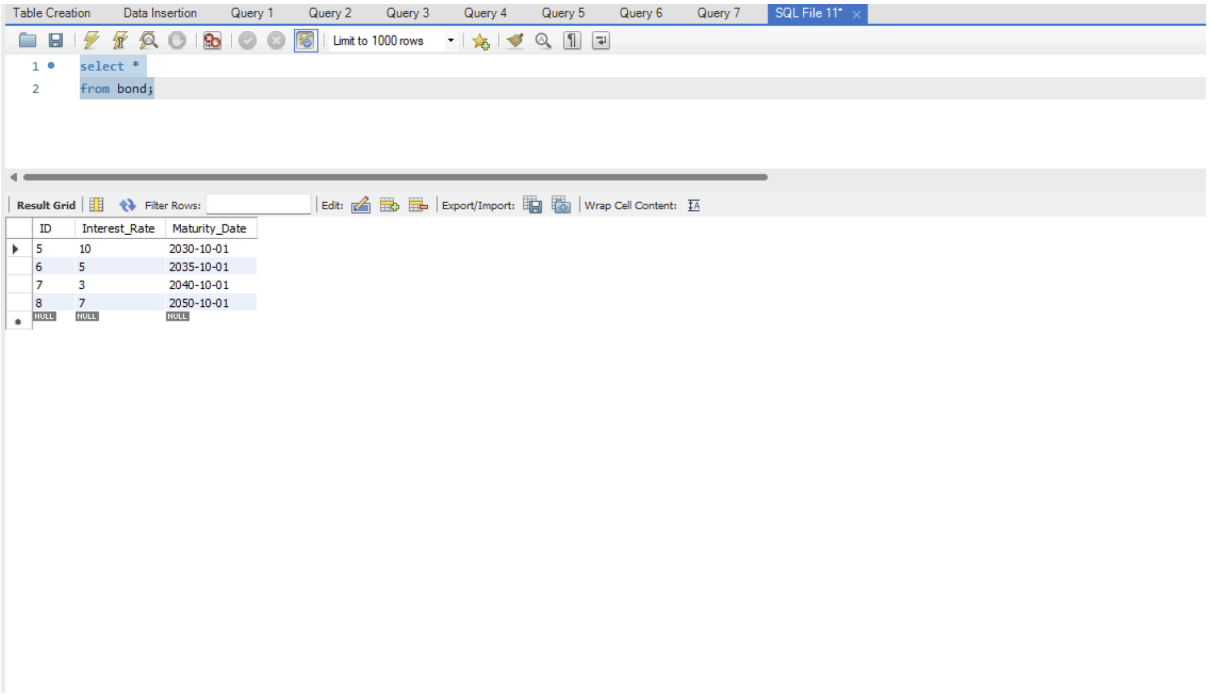


Table Creation
Data Insertion
Query 1
Query 2
Query 3
Query 4
Query 5
Query 6
Query 7
SQL File 11*
Limit to 1000 rows
select *
from bond;
Result Grid
Filter Rows:
Edit:
Export/Import:
Wrap Cell Content:
ID
Interest_Rate
Maturity_Date
5 10 2030-10-01
6 5 2035-10-01
7 3 2040-10-01
8 7 2050-10-01
NULL NULL NULL

FUND

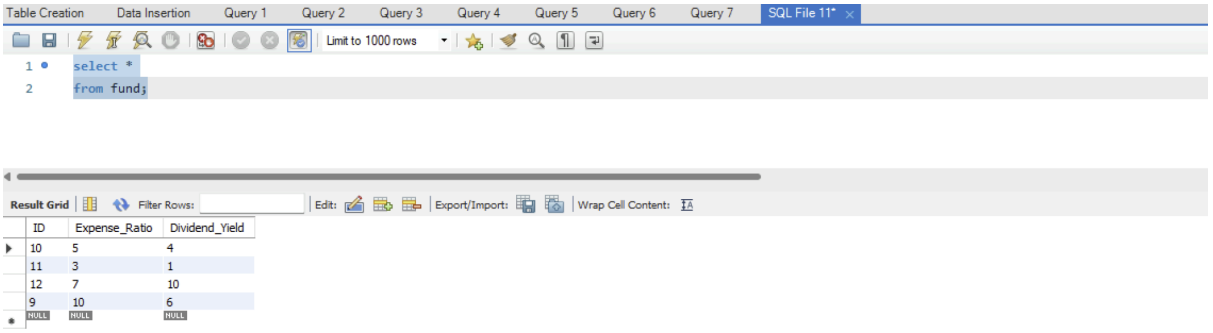


Table Creation
Data Insertion
Query 1
Query 2
Query 3
Query 4
Query 5
Query 6
Query 7
SQL File 11*
Limit to 1000 rows
select *
from fund;
Result Grid
Filter Rows:
Edit:
Export/Import:
Wrap Cell Content:
ID
Expense_Ratio
Dividend_Yield
10 5 4
11 3 1
12 7 10
9 10 6
NULL NULL NULL