Query 1:

```
SELECT * FROM Investor;
-- testing if program works
```

investor_id	name	affiliation	contact_info	net_worth
1	Emily Davis	Institutional Investor	john.doe@example.com	3718286.87
2	Chris Brown	Private Equity Firm	john.doe@example.com	2230772.56
3	Michael Johnson	Hedge Fund	bob.johnson@example.com	119079.9
4	Emily Davis	Venture Capital Firm	bob.johnson@example.com	9098078.36
5	Chris Brown	Venture Capital Firm	bob.johnson@example.com	6310402.67
6	Jane Smith	Venture Capital Firm	john.doe@example.com	864362.92
7	John Doe	Venture Capital Firm	bob.johnson@example.com	4650822.26
8	Emily Davis	Individual Investor	jane.smith@example.com	2482361.91
9	Chris Brown	Hedge Fund	jane.smith@example.com	4600322.18
10	Michael Johnson	Private Equity Firm	bob.johnson@example.com	8445073.89
11	Emily Davis	Venture Capital Firm	john.doe@example.com	8698605.55
12	Michael Johnson	Institutional Investor	jane.smith@example.com	9692067.59
13	Jane Smith	Institutional Investor	jane.smith@example.com	4527672.93
14	Chris Brown	Venture Capital Firm	john.doe@example.com	687519.26
15	Chris Brown	Venture Capital Firm	bob.johnson@example.com	3125744.06
16	John Doe	Individual Investor	bob.johnson@example.com	495447.42
17	Chris Brown	Venture Capital Firm	jane.smith@example.com	3853321.72
18	Michael Johnson	Individual Investor	jane.smith@example.com	1077007
19	Jane Smith	Institutional Investor	john.doe@example.com	6881035.37
20	Emily Davis	Institutional Investor	jane.smith@example.com	8389297.31
21	Michael Johnson	Individual Investor	john.doe@example.com	4533237.91
22	Jane Smith	Institutional Investor	john.doe@example.com	8254083.14
23	Michael Johnson	Venture Capital Firm	john.doe@example.com	9841778.27
24	Jane Smith	Individual Investor	bob.johnson@example.com	5648619.29

Query 2:

```sql
SELECT
  i.name AS Investor_Name,
  COUNT(t.transaction_id) AS Total_Transactions,
  SUM(t.quantity * t.transaction_price) AS Total_Transaction
FROM
  Investor i
JOIN
  Portfolio p ON i.investor_id = p.investor_id
JOIN
  Transaction_Table t ON p.portfolio_id = t.transaction_id
GROUP BY
  i.name;

-- connecting investors, their portfolios, and transactions.
```

	Investor_Name	Total_Transactions	Total_Transaction
1	Chris Brown	189	467095804.1257
2	Emily Davis	204	462934422.3501
3	Jane Smith	203	483106179.9708
4	John Doe	214	553013608.2491
5	Michael Johnson	190	422478585.6855

Query 3:

```sql
SELECT
   sector,
   SUM(market_cap) AS Total_Market_Cap
FROM
   Stock
GROUP BY
   sector
HAVING
   Total_Market_Cap > 1000000;

-- shows the total market cap from the sectors listed
```

	sector	Total_Market_Cap
1	Energy	78153373112.72
2	Finance	72262432214.65
3	Healthcare	93983488290.23
4	Retail	78689470127.54
5	Technology	78082577075.07
6	Telecommunications	95168775090.3399

Query 4:

```sql
SELECT sector, COUNT(*) AS Number_of_Stocks
FROM Stock
GROUP BY sector;

-- count of stocks from each sector
```

	sector	Number_of_Stocks
1	Energy	164
2	Finance	141
3	Healthcare	190
4	Retail	162
5	Technology	162
6	Telecommunications	181

Query 5:

```
1  SELECT name AS Investor_Name
2  FROM Investor;
3
4  -- selects all investors from table investor
```

	Investor_Name
1	Emily Davis
2	Chris Brown
3	Michael Johnson
4	Emily Davis
5	Chris Brown
6	Jane Smith
7	John Doe
8	Emily Davis
9	Chris Brown
10	Michael Johnson
11	Emily Davis
12	Michael Johnson
13	Jane Smith
14	Chris Brown
15	Chris Brown
16	John Doe
17	Chris Brown
18	Michael Johnson
19	Jane Smith
20	Emily Davis
21	Michael Johnson
22	Jane Smith
23	Michael Johnson
24	Jane Smith

Query 6:

```
1  SELECT name AS Investor_Name, net_worth
2  FROM Investor
3  WHERE net_worth > 1000000;
4
5  -- investors with net worth over 1million
```

	Investor_Name	net_worth
1	Emily Davis	3718286.87
2	Chris Brown	2230772.56
3	Emily Davis	9098078.36
4	Chris Brown	6310402.67
5	John Doe	4650822.26
6	Emily Davis	2482361.91
7	Chris Brown	4600322.18
8	Michael Johnson	8445073.89
9	Emily Davis	8698605.55
10	Michael Johnson	9692067.59
11	Jane Smith	4527672.93
12	Chris Brown	3125744.06
13	Chris Brown	3853321.72
14	Michael Johnson	1077007
15	Jane Smith	6881035.37
16	Emily Davis	8389297.31
17	Michael Johnson	4533237.91
18	Jane Smith	8254083.14
19	Michael Johnson	9841778.27
20	Jane Smith	5648619.29
21	Chris Brown	2247029.07
22	John Doe	5556043.26

Query 7:

```
1  SELECT
2   ticker,
3   sector,
4   market_cap,
5   RANK() OVER (PARTITION BY sector ORDER BY market_cap DESC) AS MarketCapRank
6  FROM
7   Stock;
8
9  --divides data in partitions  for each sector (stock tickers as different groups) then I order it by market_cap then ranks them
```

	ticker	sector	market_cap	MarketCapRank
1	AMZN	Energy	996651119.36	1
2	TSLA	Energy	993472258.62	2
3	AAPL	Energy	987922363.55	3
4	GOOGL	Energy	984904212.98	4
5	TSLA	Energy	984343809.04	5
6	TSLA	Energy	966061514.76	6
7	AAPL	Energy	962715411.75	7
8	GOOGL	Energy	954705604.47	8
9	AMZN	Energy	951875563.64	9
10	AMZN	Energy	948814268.87	10
11	MSFT	Energy	944029757.24	11
12	AMZN	Energy	933218018.57	12
13	MSFT	Energy	930097218.01	13
14	MSFT	Energy	913172950.48	14
15	GOOGL	Energy	912386441.58	15
16	AMZN	Energy	892126397.42	16
17	TSLA	Energy	884050593.1	17
18	AMZN	Energy	876801967.68	18
19	AAPL	Energy	875522866.23	19
20	AMZN	Energy	871089923.71	20
21	AAPL	Energy	865239706.8	21