Database Schema Design

To create Traders table:

```
USE TRADING;

CREATE TABLE dbo.Traders(
    trader_id INT IDENTITY(1, 1) PRIMARY KEY,
    name VARCHAR(255) NOT NULL,
);
```

It has two columns:

- trader_id which stores the primary key for each trader (type int)
- name which is the unique name of each trader (type varchar)

We insert each trader like so:

```
USE TRADING;

INSERT INTO dbo.Traders(name)

VALUES
('trader_1'),
('trader_2'),
('trader_3'),
('trader_4'),
('trader_5');
```

SQL will automatically assign each trader with their corresponding trading_id.

To create the Trades table, we simply import the data.

We must assign a trade_id to each of the 100 trades, we use the following query. We also set it as the primary key:

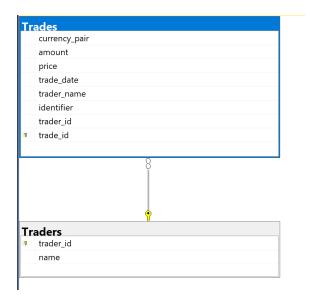
Database Schema Design

```
ALTER TABLE dbo.Trades
ADD trade_id INT IDENTITY(1,1) PRIMARY KEY
```

The columns have the following data types:

```
currency_pair (type nvarchar(50))
amount (type money)
price (type decimal(18,4))
trade_date (type datetime2(7))
trade_name (type nvarchar(50))
identifier
```

Here is the final schema as discussed in the specifications. Here was have a one-to-many relationship between trades and traders (i.e. one trader per trade, a trader can have multiple trades):



Database Schema Design 2