```
--Elliott Evans
-- Tim Sullivan
--11/8/2014
-- This is the SQL DDL for Portfolio project B.
--It creates all of the necessary tables for
-- the project while identifying keys and restraints
-- from the E/R Design.
create table users (
-- This is the table containing all of the users in the system.
-- Each user must have a unique email address, checks to see if
--there is an "@" in the name. This will be the user name as well.
email varchar(256) not null primary key constraint email_check CHECK (email LIKE '% @ %'),
--Each user must have a password of at least 8 characters
password varchar(64) not null constraint passwd_check CHECK (password LIKE '_____%')
);
create table portfolios(
-- This is the table of every portfolio that is owned by every user.
-- Each portfolio has an id that uniquely identifies it.
id varchar(256) not null primary key,
--Each portfolio has an associated cash amount
cash_amount double precision not null
);
create table owned_by(
```

```
-- This table associates users with their portfolios.
--Each user identified by his name and email, so we include user's
--email in this table
user_email varchar(256) not null references users(email),
-- Each portfolio has an id.
portfolio_id varchar(256) not null references portfolios(id)
create table holdings (
-- The holdings_of a portfolio.
shares integer not null,
stock_symbol varchar(16) not null references cs339.stockssymbols(symbol),
-- Each portfolio has a unique id.
portfolio_id varchar(256) not null references portfolios(id)
create table dailies(
-- This is a list of daily information on every stock.
--Each daily uniquely identified by its timestamp
time_stamp integer not null primary key,
-- Each daily has a stock symbol that should reference a not null
--value from stocks
stock_symbol varchar(16) not null references cs339.stockssymbols(symbol),
--Strike prie of the first trade of the day
open_value double precision not null,
--Highest strike price during the day
high_value double precision not null,
```

```
---
--Lowest strike price during the day
---
low_value double precision not null,
---
---Strike price of the last trade of the day
---
close_value double precision not null,
---
--Total number of shares traded during the day
---
volume integer not null
);
```