

```
function [exchangeMatrix] = createExchange_01( ...
    timeStamp)

% Create theoretical stocks.

% This will create a list of
% theoretical stocks with information
% about their behavior.

% Create theoretical stocks and add data
% to their structures. Create a
% "stockExchange" matrix to store a list
% of all the stocks theoretically available
% for purchase. Each stock in the exchange
% will have

% This code will create 5 imaginary stocks
% with a range of share prices. The
% stock exchange, timeStamp, and trading
% volume will be the same for all the stocks,
% since price is the focus of the simulation.

exchangeMatrix(1) = createStock( ...
    'Stock_A',...
    'AAA',...
    'Exchange_01',...
    10.0,...
    timeStamp(1),...
    timeStamp(2),...
    timeStamp(3),...
    11.0,...
    9.0,...
    10.0,...
    10000);
exchangeMatrix(2) = createStock( ...
    'Stock_B',...
    'BBB',...
    'Exchange_01',...
    50.0,...
    timeStamp(1),...
    timeStamp(2),...
    timeStamp(3),...
    51.0,...
    49.0,...
    50.0,...
    10000);
exchangeMatrix(3) = createStock( ...
    'Stock_C',...
    'CCC',...
    'Exchange_01',...
    90.0,...
```

```
        timeStamP(1), ...
        timeStamP(2), ...
        timeStamP(3), ...
        91.0, ...
        89.0, ...
        90.0, ...
        10000);
exchangeMatrix(4) = createStock( ...
    'Stock_D', ...
    'DDD', ...
    'Exchange_01', ...
    130.0, ...
    timeStamP(1), ...
    timeStamP(2), ...
    timeStamP(3), ...
    131.0, ...
    129.0, ...
    130.0, ...
    10000);
exchangeMatrix(5) = createStock( ...
    'Stock_E', ...
    'EEE', ...
    'Exchange_01', ...
    170.0, ...
    timeStamP(1), ...
    timeStamP(2), ...
    timeStamP(3), ...
    171.0, ...
    169.0, ...
    170.0, ...
    10000);

return;

end
```