Assignment Three Outline and Rubric

Outline

The market created for assignment two now contains 6,000 stocks and a buyer, capable of creating a portfolio.

1. Create upwards of 100,000 buyers at the time of market initialization. For each buyer, institute:
    - a mechanism to save all stock purchases, in terms of symbol, purchase price and volume purchased
    - for your personal computer, investigate how many buyers you can create at one time before your computer become unstable or slow. Back off and limit the algorithm to a steady, usable rate, but experiment with its limit.

2. For each stock, create a mechanism to update the number of stocks sold, to reflect the number of shares left to be sold to the public.

3. Once a single purchase of a stock is made, raise the price a random amount. Continue raising the price until all shares are sold. New buyers must buy at the current price.

4. Have the buyer put a random quantity of their stock up for sale, at a price slightly higher than the market.

5. Once all the stock for a symbol is purchased (or sold out):
    - if a buyer asks to purchase a stock, require the buyer to wait until a comparable number of shares comes on the market by a seller.
    - Once a buyer appears who is willing to sell their share, buy the amount at the price they ask.

Log each of the above operations to the console or to a file, using System.out.println(). This will prove the completion of each feature.

Grading Rubric
Four points are available for each of the above features. Partial completion of a feature merits partial credit. Twenty (20) points total, for a weighted value of 20% term grade.

Due: August 18th