item_properties.csv

These are the item properties for each item. When testing your application, you first load in this file to initialize your item properties.

After the item properties are initialized, the first manifest is generated and then loaded back in to set up the initial inventory. The expected capital after deducting the total cost of the manifest from the initial capital of \$100,000 is:

\$42,717.88

And the expected inventory corresponds exactly to the reorder amounts for each item:

{biscuits=575, chicken=425, chips=200, frozen meat=575, yoghurt=325, milk=425, ice=325, frozen vegetable mix=325, rice=300, bread=200, beef=550, lettuce=350, cheese=450, grapes=225, celery=350, mushrooms=325, ice cream=250, beans=525, pasta=250, nuts=250, chocolate=375, fish=475, asparagus=275, tomatoes=400}

sales_log_X.csv

These are sample sales logs. Your application will need to parse sales logs of this form. You may use them for testing your sales log parsing. In addition, you may use them for testing your application functionality, including manifest optimization.

The below table lists the expected values for a perfectly optimized manifest. Each line is cumulative, meaning that each file was loaded in one after another, not across different instances of the application. After loading in each file, a manifest was generated, and loaded back in. More explicitly, the process was to:

- 1. Load in item_properties.csv
- 2. Generate a manifest and load it back in.
- 3. Load in sales_log_0.csv
- 4. Generate a manifest and load it back in.
- 5. Load in sales_log_1.csv
- 6. Generate a manifest and load it back in.
- 7. Continue until the final manifest after sales_log_4.csv

File	Capital (after loading in manifest)
item_properties.csv	\$42,717.88 (as above)
sales_log_0.csv	\$27,569.79
sales_log_1.csv	\$42,069.94
sales_log_2.csv	\$47,549.04
sales_log_3.csv	\$51,838.22
sales_log_4.csv	\$56,140.25

And the expected final inventory is:

{biscuits=853, chicken=571, chips=145, frozen meat=637, yoghurt=338, milk=549, ice=279, frozen vegetable mix=509, rice=386, bread=182, beef=701, lettuce=430, cheese=419, grapes=198, celery=263, mushrooms=225, ice cream=329, beans=805, pasta=343, nuts=357, chocolate=540, fish=734, asparagus=253, tomatoes=574}

manifest.csv

This is a sample manifest. Your application will need to write and parse manifests of this form. This file is only useful for testing your manifest parsing and writing.