Lab 1: Multi-tasked Food Distribution

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COSC 3319

Section 01

MWF

“C” Option

**“D-“ Requirements:**

Final Result:

[bill@Manjaro-HP DSA-Lab-1]$ ./bin/productdistributionmain < Data.txt > res1.txt

In file res1.txt:

How many Product Generators?

How many points of sale?

B delivered.

GateKeeper insert accepted RICE B

Next grain shipment arrives 5.66092E-02 Time units!

B delivered.

GateKeeper insert accepted RICE B

Next grain shipment arrives 9.14843E-02 Time units!

B delivered.

GateKeeper insert accepted SQUASH B

Next grain shipment arrives 4.34619E-01 Time units!

RICE B Removed by GateKeeper for shipment.

B delivered.

Retail Sales successfuly sold RICE B

GateKeeper insert accepted TOMATO B

Next grain shipment arrives 8.03268E-01 Time units!

RICE B Removed by GateKeeper for shipment.

B delivered.

...

GateKeeper insert accepted WHEAT B

Next grain shipment arrives 3.51390E+00 Time units!

Retail Sales successfuly sold TOMATO B

WHEAT B Removed by GateKeeper for shipment.

Retail Sales successfuly sold WHEAT B

Retail Sales successfuly sold FOWEL M

Retail Sales successfuly sold TOMATO B

Retail Sales successfuly sold TOMATO B

M delivered.

GateKeeper insert accepted STEAK M

Next grain shipment arrives 1.97321E-01 Time units!

M delivered.

GateKeeper insert accepted FOWEL M

Next grain shipment arrives 3.60628E-01 Time units!

B delivered.

GateKeeper insert accepted WHEAT B

Next grain shipment arrives 3.23951E+00 Time units!

STEAK M Removed by GateKeeper for shipment.

Retail Sales successfuly sold STEAK M

Retail Sales successfuly sold WHEAT B

FOWEL M Removed by GateKeeper for shipment.

Hours of operation prior to closing: 40.963872000

M delivered.

Retail Sales successfuly sold FOWEL M

|  |  |  |
| --- | --- | --- |
| Queue size | # of Generators | # of Points of Sale |
| 10 | 1 | 1 |
| 10 | 1 | 2 |
| 10 | 1 | 3 |
| 10 | 1 | 4 |
| 10 | 2 | 1 |
| 10 | 2 | 2 |
| 10 | 2 | 3 |
| 10 | 2 | 4 |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Queue Size | # of Gen | # of POS | Total food packs | Meat packs | Non-meat packs | sales |
| 10 | 1 | 1 | 10 | 2 | 8 | 10 |
| 10 | 1 | 2 | 13 | 2 | 11 | 13 |
| 10 | 1 | 3 |  |  |  |  |
| 10 | 1 | 4 |  |  |  |  |
| 10 | 2 | 1 |  |  |  |  |
| 10 | 2 | 2 |  |  |  |  |
| 10 | 2 | 3 |  |  |  |  |
| 10 | 2 | 4 |  |  |  |  |
| 10 | 3 | 1 |  |  |  |  |
| 10 | 3 | 2 |  |  |  |  |
| 10 | 3 | 3 |  |  |  |  |
| 10 | 3 | 4 |  |  |  |  |
| 15 | 3 | 4 |  |  |  |  |
| 20 | 3 | 4 |  |  |  |  |