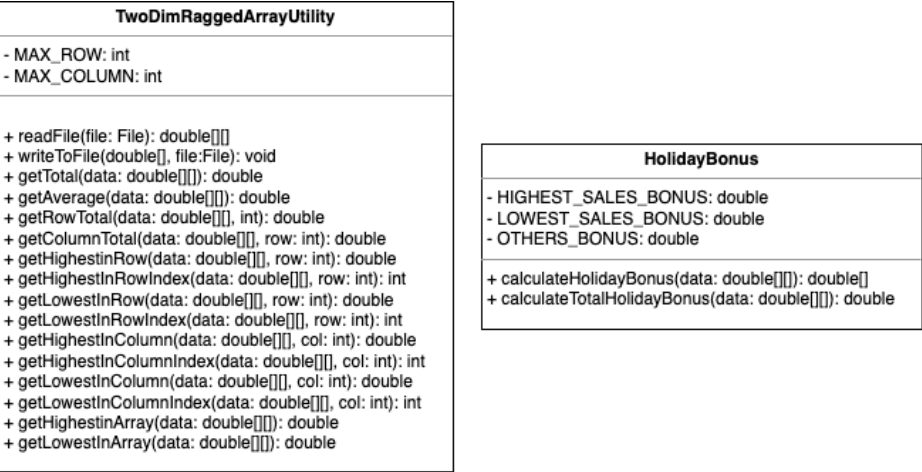


NNguyen - Assignment 5

UML Diagram



JUnit Test Cases

TwoDimRaggedArrayUtilityTestStudent

✓ Passed

Run

TwoDimRaggedArrayUtilityTestStudent

✓ TwoDimRaggedArrayUtilityTestStudent 18 ms

✓ testGetLowestInArray 5 ms

✓ testGetHighestInRowIndex 0 ms

✓ testGetHighestInRow 1 ms

✓ testGetTotal 0 ms

✓ testGetLowestInRow 1 ms

✓ testGetLowestInRowIndex 0 ms

✓ testGetAverage 1 ms

✓ testReadFile 1 ms

✓ testGetLowestInColumnIndex 0 ms

✓ testGetLowestInColumn 0 ms

✓ testWriteToFile 7 ms

✓ testGetHighestInColumnIndex 0 ms

✓ testGetHighestInColumn 1 ms

✓ testGetRowTotal 0 ms

✓ testGetColumnTotal 1 ms

✓ testGetHighestInArray 0 ms

✓ Tests passed: 16 of 16 tests – 18 ms

/Users/nick/Library/Java/JavaVirtualMachines/openjdk-21.0.1/Contents/Home/bin/java ...

Process finished with exit code 0

HolidayBonusTestStudent

✓ Passed!

Run

HolidayBonusTestStudent

✓ HolidayBonusTestStudent 7 ms

✓ testCalculateTotalHolidayBonus 7 ms

✓ testCalculateHolidayBonus 0 ms

✓ Tests passed: 2 of 2 tests – 7 ms

/Users/nick/Library/Java/JavaVirtualMachines/openjdk-21.0.1/Contents/Home/bin/java ...

Process finished with exit code 0

GUI

Program starts

District Sales Report

Disney World Retail District 5 Sales Report

	Books	Tsum Tsum	Trading Pins	Star Wars	Lego	Marvel	Total	Holiday Bonus
Emporium								
World Traveler								
Discovery Trading ...								
Merchant of Venus								
Once Upon a Toy								
Tatooine Traders								
Total								

Highest Sales in Categ...
Lowest Sales in Categ...

Load Sales DataExit

dataSet1.txt

File:

dataSet1.txt

1	1	2	3
2	4	5	
3	6	7	8

Results after loading sales

District Sales Report

Disney World Retail District 5 Sales Report

	Books	Tsum Tsum	Trading Pins	Star Wars	Lego	Marvel	Total	Holiday Bonus
Emporium	\$1.00	\$2.00	\$3.00				\$6.00	\$3,000.00
World Traveler	\$4.00	\$5.00					\$9.00	\$4,000.00
Discovery Trading ...	\$6.00	\$7.00	\$8.00				\$21.00	\$15,000.00
Merchant of Venus								
Once Upon a Toy								
Tatooine Traders								
Total	\$11.00	\$14.00	\$11.00				\$36.00	\$22,000.00

Highest Sales in Categ...Lowest Sales in Categ...

Load Sales Data

Copy File

Exit

dataSet2.txt

File:

dataSet2.txt

1	7	2	9	4
2	5			
3	8	1	3	
4	11	6	7	2

Results after loading sales

District Sales Report

Disney World Retail District 5 Sales Report

	Books	Tsum Tsum	Trading Pins	Star Wars	Lego	Marvel	Total	Holiday Bonus
Emporium	\$7.00	\$2.00	\$3.00	\$4.00			\$22.00	\$14,000.00
World Traveler	\$5.00						\$5.00	\$1,000.00
Discovery Trading ...	\$8.00	\$1.00	\$3.00				\$12.00	\$4,000.00
Merchant of Venus	\$11.00	\$6.00	\$7.00	\$2.00			\$26.00	\$13,000.00
Once Upon a Toy								
Tatooine Traders								
Total	\$31.00	\$9.00	\$19.00	\$6.00			\$65.00	\$32,000.00

■ Highest Sales in Categ...
■ Lowest Sales in Categ...

Load Sales Data Copy File Exit

dataSet3.txt

File:

dataSet3.txt

1	7.2	2.5	9.3	4.8
2	5.9			
3	8.1	1.7	3.3	
4	11.6	6.9	7.3	2.7

Results after loading sales

District Sales Report

Disney World Retail District 5 Sales Report

	Books	Tsum Tsum	Trading Pins	Star Wars	Lego	Marvel	Total	Holiday Bonus
Emporium	\$7.20	\$2.50	\$3.30	\$4.80			\$23.80	\$14,000.00
World Traveler	\$5.90						\$5.90	\$1,000.00
Discovery Trading ...	\$8.10	\$1.70	\$3.30				\$13.10	\$4,000.00
Merchant of Venus	\$11.80	\$6.90	\$7.30	\$2.70			\$28.50	\$13,000.00
Once Upon a Toy								
Tatooine Traders								
Total	\$32.80	\$11.10	\$19.90	\$7.50			\$71.30	\$32,000.00

■ Highest Sales in Categ...
■ Lowest Sales in Categ...

Load Sales Data Copy File Exit

dataSet4.txt

File:

dataSet4.txt	
1	-2.5 -5.3 6.1
2	-4.4 8.2
3	2.3 -7.5
4	-4.2 7.3 -5.9 2.6

Results after loading sales

District Sales Report								
Disney World Retail District 5 Sales Report								
	Books	Tsum Tsum	Trading Pins	Star Wars	Lego	Marvel	Total	Holiday Bonus
Emporium	-\$2.50	-\$5.30	\$6.10				-\$1.70	\$5,000.00
World Traveler	-\$4.40	\$8.20					\$3.80	\$5,000.00
Discovery Trading ...	\$2.30	-\$7.50					-\$5.20	\$5,000.00
Merchant of Venus	-\$4.20	\$7.30	-\$5.90	\$2.60			-\$0.20	\$7,000.00
Once Upon a Toy								
Tatooine Traders								
Total	-\$8.80	\$2.70	\$0.20	\$2.60			-\$3.30	\$22,000.00

■ Highest Sales in Categ...
■ Lowest Sales in Categ...

[Load Sales Data](#)
[Copy File](#)
[Exit](#)

district3.txt

File:

district3.txt ×						
1	1.65	4.50	2.36	7.45	3.44	6.23
2	2.22	-3.24	-1.66	-5.48	3.46	
3	4.23	2.29	5.29			
4	2.76	3.76	4.29	5.48	3.43	
5	3.38	3.65	3.76			
6	2.46	3.34	2.38	8.26	5.34	

Results after loading sales

District Sales Report

Disney World Retail District 5 Sales Report

	Books	Tsum Tsum	Trading Pins	Star Wars	Lego	Marvel	Total	Holiday Bonus
Emporium	\$1.65	\$4.50	\$2.36	\$7.45	\$3.44	\$6.23	\$25.63	\$17,000.00
World Traveler	\$2.22	-\$3.24	-\$1.66	-\$5.48	\$3.46		-\$4.70	\$4,000.00
Discovery Trading ...	\$4.23	\$2.29	\$5.29				\$11.81	\$12,000.00
Merchant of Venus	\$2.76	\$3.76	\$4.29	\$5.48	\$3.43		\$19.72	\$9,000.00
Once Upon a Toy	\$3.38	\$3.65	\$3.76				\$10.79	\$6,000.00
Tatooine Traders	\$2.46	\$3.34	\$2.38	\$8.35	\$5.34		\$21.78	\$16,000.00
Total	\$16.70	\$14.30	\$16.42	\$15.71	\$15.67	\$6.23	\$85.03	\$64,000.00

 Highest Sales in Categ...
 Lowest Sales in Categ...

[Load Sales Data](#) [Copy File](#) [Exit](#)

district4.txt

File:


district4.txt	
1	1253.65 4.50 2154.36 7532.45 3388.44
2	2876.22 -3.24 1954.66
3	4896.23 2.29 5499.29
4	2256.76 3.76 4286.29 5438.48 3794.43
5	3184.38 3654.65 3455.76 6387.23 4265.77 4592.45
6	2657.46 3265.34 2256.38 8935.26 5287.34 6598.23

Results after loading sales

District Sales Report

Disney World Retail District 5 Sales Report

	Books	Tsum Tsum	Trading Pins	Star Wars	Lego	Marvel	Total	Holiday Bonus
Emporium	\$1,253.65	\$4.50	\$2,154.36	\$7,532.45	\$3,388.44		\$14,333.40	\$8,000.00
World Traveler	\$2,876.22	-\$3.24	\$1,954.66				\$4,827.64	\$3,000.00
Discovery Trading ...	\$4,896.23	\$2.29	\$5,499.29				\$10,397.81	\$12,000.00
Merchant of Venus	\$2,256.76	\$3.76	\$4,286.29	\$5,438.48	\$3,794.43		\$15,779.72	\$9,000.00
Once Upon a Toy	\$3,184.38	\$3,654.65	\$3,455.76	\$6,387.23	\$4,265.77	\$4,592.45	\$25,540.24	\$14,000.00
Tatooine Traders	\$2,657.46	\$3,265.34	\$2,256.38	\$8,935.26	\$5,287.34	\$6,598.23	\$29,000.01	\$21,000.00
Total	\$17,124.70	\$6,927.30	\$19,606.74	\$28,293.42	\$16,735.98	\$11,190.68	\$99,878.82	\$67,000.00

 Highest Sales in Categ...
 Lowest Sales in Categ...

[Load Sales Data](#) [Copy File](#) [Exit](#)

district5.txt

File:

district5.txt

1	12536.54	45665.05	21543.66	75324.57	33884.48	65982.39
2	28762.21	35762.42	19546.63			
3	48962.34	28552.95	23863.66	54992.97		
4	22567.63	36237.64	42862.95	54384.86	37944.37	
5	31843.86	36546.57	34557.68	63872.39	42657.70	45924.51
6	26574.65	32653.46	22563.87	89352.68	52873.49	

Results after loading sales

District Sales Report

Disney World Retail District 5 Sales Report

	Books	Tsum Tsum	Trading Pins	Star Wars	Lego	Marvel	Total	Holiday Bonus
Emporium	\$12,536.54	\$45,982.39	\$21,543.66	\$75,324.57	\$33,884.48	\$65,982.39	\$254,936.69	\$16,000.00
World Traveler	\$28,762.21	\$35,762.42	\$19,546.63				\$84,071.26	\$5,000.00
Discovery Trading ...	\$48,962.34	\$28,552.95	\$23,863.66	\$54,992.97			\$156,371.92	\$10,000.00
Merchant of Venus	\$22,567.63	\$36,237.64	\$42,862.95	\$54,384.86	\$37,944.37		\$193,997.45	\$12,000.00
Once Upon a Toy	\$31,843.86	\$36,546.57	\$34,557.68	\$63,872.39	\$42,657.70	\$45,924.51	\$255,402.71	\$11,000.00
Tatooine Traders	\$26,574.65	\$32,653.46	\$22,563.87	\$89,352.68	\$52,873.49		\$224,018.15	\$16,000.00
Total	\$171,247.23	\$215,418.09	\$164,938.45	\$337,927.47	\$167,360.04	\$111,906.90	\$1,168,798.18	\$70,000.00

Highest Sales in Categ...
Lowest Sales in Categ...

Load Sales Data

Copy File

Exit

Two additional input files

studentDataset1.txt

File:

1	67.89	54.32	0.11					
2	142.99	-5.27	88.88	21.34	99.99			
3	43.21	32.1	9.87	-5.27				
4	76.54	-2.22	11.11	22.22				
5								

Results after loading sales

District Sales Report

Disney World Retail District 5 Sales Report

	Books	Tsum Tsum	Trading Pins	Star Wars	Lego	Marvel	Total	Holiday Bonus
Emporium	\$67.89	\$54.32	\$0.11				\$122.32	\$8,000.00
World Traveler	\$142.99	-\$5.27	\$88.88	\$21.34	\$99.99		\$347.93	\$17,000.00
Discovery Trading ...	\$43.21	\$32.10	\$9.87	-\$5.27			\$79.91	\$5,000.00
Merchant of Venus	\$76.54	-\$2.22	\$11.11	\$22.22			\$107.65	\$9,000.00
Once Upon a Toy								
Tatooine Traders								
Total	\$330.63	\$78.93	\$109.97	\$38.29	\$99.99		\$657.81	\$39,000.00

Highest Sales in Categ...
Lowest Sales in Categ...

Load Sales Data

Copy File

Exit

studentDataset2.txt

File:



studentDataset2.txt



```
1 86.0 69.0 24.0 27.99
2 8.99 52.7 5.0 9.23 27.2
3 41.0 10.52
4 9.62 2.0 67.0 1.52 8.56
```

Results after loading sales

District Sales Report								
Disney World Retail District 5 Sales Report								
	Books	Tsum Tsum	Trading Pins	Star Wars	Lego	Marvel	Total	Holiday Bonus
Emporium	\$26.00	\$29.00	\$24.00	\$27.99			\$206.99	\$17,000.00
World Traveler	\$8.99	\$52.70	\$5.00	\$9.23	\$27.20		\$103.12	\$11,000.00
Discovery Trading ...	\$41.00	\$10.52					\$51.52	\$4,000.00
Merchant of Venus	\$9.62	\$2.00	\$67.00	\$1.52	\$8.56		\$88.70	\$10,000.00
Once Upon a Toy							\$25,540.24	\$14,000.00
Tatooine Traders							\$29,000.01	\$21,000.00
Total	\$145.61	\$134.22	\$96.00	\$38.74	\$35.76		\$450.33	\$42,000.00

Highest Sales in Categ...

Lowest Sales in Categ...

Load Sales DataCopy FileExit

Questions to answer

🔗 Write about your Learning Experience, highlighting your lessons learned and learning experience from working on this project.

This project was honestly pretty frustrating, but I did learn quite a bit about 2D arrays. Data structures is a course that will likely be difficult, so I'm glad I'm getting some a little practice with them right now.

🔗 What have you learned?

I learned how to better manipulate arrays and how to write more efficient and concise code.

🔗 What did you struggle with?

I struggled especially with the `readFile()` and `writeFile()` methods. This was mainly because the method signatures on the Javadoc returned a `FileNotFoundException`. I wasn't too sure how strict my professor was on changing the method signature, so I decided to keep it. Otherwise, I would've changed those method signatures to throw an `IOException` instead since I used a `BufferedReader` and `BufferedWriter`.

🔗 What would you do differently on your next project?

Nothing, really. I'm glad I started this project early and got it over with. It was pretty educational and had some fun parts.

🕒 **What parts of this assignment were you successful with, and what parts (if any) were you not successful with?**

I think I was successful for the most part with this assignment; I passed all my tests and overall learned a good amount about 2D ragged arrays.

🕒 **Provide any additional resources/links/videos you used to while working on this assignment/project.**

N/A