**Assignment 3**

Due: Tue Jul 25, 2023 11:59pmDue: Tue Jul 25, 2023 11:59pm

Ungraded, 20 Possible Points20 Possible Points

Add Comment

Details

**Assignment 3**  
**Please use the attached** [**src**](https://deanza.instructure.com/courses/30795/files/9777111?wrap=1)

**[Download src](https://deanza.instructure.com/courses/30795/files/9777111/download?download_frd=1) files as a starting point.**  
Write a program that opens the salesdat.txt file and processes its contents. The program should display the following per store:

1. The total sales for each week. (Should print 5 values - one for each week).
2. The average daily sales for each week. (Should print 5 values - one for each week) - Take "a" (hopefully you created an array of 5 values) - and then divide each value by 7.
3. The total sales for all the weeks. (Should print 1 value) - Take "a" (hopefully you created an array of 5 values) and add all five values.
4. The average weekly sales. (Should print 1 value) - Take "b" (hopefully you created an array of 5 values) - add and divide by 5
5. The week with the highest amount in sales. (Should print 1 week #) - Take "a" (hopefully you created an array of 5 values) - find the highest values.
6. The week with the lowest amount in sales. (Should print 1 week #) - Take "a" (hopefully you created an array of 5 values)

The file contains the dollars amount of sales that a retail store made each day for a number of weeks. Each line in the file contains thirty five numbers, which are sales numbers for five weeks. The numbers are separated by space. Each line in the file represents a separate store.  
  
Please make sure that you:

1. Add a class diagram with your submission.
2. Add comments to your code in FileIO class.
3. Make sure you adequately test your code.
4. Provide a user-friendly interface (Console based).

User Interface - should not be dumping data for all stores in one shot on the screen.  
What should the UI look like?  
Start with a user-friendly invitation message -   
  
Welcome to Franchise App etc....  
We have data for 6 stores for the last 5 weeks.  
  
Loop  
  
Select a store # you want to see analytics for - enter <1 through 6> 5  
  
Select operation -

1. Enter 1 for total sales for each week
2. Enter 2 for average daily sales for each week
3. Enter 3 for total sales for all weeks
4. Enter 4 for average weekly sales
5. Enter 5 for the week with the highest amount in sales.
6. Enter 6 for the week with the lowest amount in sales.
7. Enter 7 for all analytical data. (1 through 6)

7:  
  
Output the analytical data.  
  
  
Grading Rubric -   
Criteria and Ratings Points  
No errors, program always works correctly and meets the specification(s).  
2.0 pts  
Code could be reused as a whole or each routine could be reused.  
2.0 pts  
Concepts of Array of Objects and Text File Input/Output are applied.  
7.0 pts  
Java coding conventions are followed.  
1.0 pts  
Code Readability (as suggested in class).  
1.0 pts  
Adequately tested (unique test cases, covering boundary conditions).  
1.0 pts  
Class Diagram  
1.0 pts  
User Interface for store and operations is provided.  
5.0 pts  
Total Points: 20.0  
  
  
Tips  
Array of Arrays contained in objects -   
1 - Avoiding NPE's  
 if(Store[i]!=null)  
 ....code for accessing the values.  
2 - Store.java - declare instance variables for each value being computed.  
3 - Store.java - write a print() that accepts an integer and prints the values one at a time.   
 6 calculations - int 1 to 6 - print the respective value from instance variables.  
 option 7 - print all the values.  
4 - UI.java - menu for accessing parameter   
 Need to call print method for a given store

View Rubric

| Rubric for Assignment 3 | | |
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| **Rubric for Assignment 3** | | |
| **Criteria** | **Ratings** | **Pts** |
| **No errors, program always works correctly and meets the specification(s).**  **view longer description** | 2 pts  Full Marks  0 pts  No Marks | / 2 pts |
| **Code could be reused as a whole or each routine could be reused.**  **view longer description** | 2 pts  Full Marks  0 pts  No Marks | / 2 pts |
| **Concepts of Array of Objects is applied**  **view longer description** | 7 pts  Full Marks  0 pts  No Marks | / 7 pts |
| **Java coding conventions are followed.**  **view longer description** | 2 pts  Full Marks  0 pts  No Marks | / 2 pts |
| **Code Readability (as suggested in class).**  **view longer description** | 2 pts  Full Marks  0 pts  No Marks | / 2 pts |
| **Adequately tested (unique test cases, covering boundary conditions).**  **view longer description** | 2 pts  Full Marks  0 pts  No Marks | / 2 pts |
| **Class Diagram**  **view longer description** | 3 pts  Full Marks  0 pts  No Marks | / 3 pts |
| Total Points: 0 | | |