# Submission Worksheet

#### **CLICK TO GRADE**

https://learn.ethereallab.app/assignment/IT114-450-M2024/it114-module-2-java-problems/grade/jah89

#### IT114-450-M2024 - [IT114] Module 2 Java Problems

#### Submissions:

Submission Selection

1 Submission [active] 6/1/2024 11:45:29 AM

#### Instructions

^ COLLAPSE ^

Overview Video: <a href="https://youtu.be/4M8Di5jrcZQ">https://youtu.be/4M8Di5jrcZQ</a>

#### Guide:

- Make sure you're in the main branch locally and git pull origin main any pending changes.
- 2. Make a new branch per the recommended branch name below ( git checkout -b ... ).
- Grab the template code from

https://gist.github.com/MattToegel/fdd2b37fa79a06ace9dd259ac82728b6.

- Create individual Java files for each problem and save the files inside a subfolder of your choice.
  - They should end with the file extension in lowercase .java .
- 5. Move the unedited template files to GitHub.
  - 1. git add .
  - git commit -m "adding template files"
  - git push origin branch name (see below).
  - Create and open a pull request from the homework branch to main (leave it open until later steps).
- Note: As you work, it's recommended to add/commit at least after each solution is done (i.e., 3+ times in this case).
  - Make sure the files are saved before doing this.
- Fill in the items in the worksheet below (save as often as necessary).
- Once finished, export the worksheet.
- Add the output file to any location of your choice in your repository folder (i.e., a Module2 folder).
- 10. Check that git sees it via git status.
- 11. If everything is good, continue to submit.

- Track the file(s) via git add.
- 2. Commit the changes via git commit (don't forget the commit message).
- 3. Push the changes to GitHub via git push (don't forget to refer to the proper branch).
- Create a pull request from the homework related branch to main (i.e., main <- "homework branch").
- Open and complete the merge of the pull request (it should turn purple).
- 6. Locally checkout main and pull the latest changes (to prepare for future work).
- 12. Take the same output file and upload it to Canvas.

Branch name: M2-Java-Problems

Tasks: 6 Points: 10.00

Problem 1 (3 pts.)



Task #1 - Points: 1

Text: Screenshot of the Problem 1 Solved Code and Output

🕕 Details:

Only make edits where the template code mentions.

Solution should ensure that any passed in array will have only the odd values output. Requires at least 2 screenshots (code + output from terminal)

#1) Screenshot the output of the solved problem



## Caption (required) ~

Describe/highlight what's being shown Showing

#2) Screenshot the code solution (ucid/date must be included as a comment)



## Caption (required) <

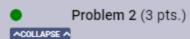
Describe/highlight what's being shown
Showing code added to problem1

#### Explanation (required) <

Explain in concise steps how this logically works



I used for-each loop to iterate over the "arr" array. In this case the num variable is just the current element in the array during that iteration. Inside the if statement is checking for odd numbers in the array. The num%2 shows the remainder when the "num" is divided by 2. So because of this if it does not equal zero it is a odd number. So then if it's an odd number it goes to print statement and then prints the number("num") from array that gave a remainder and adds a space after for formatting.





Task #1 - Points: 1

Text: Screenshot of the Problem 2 Solved Code and Output

① Details:

Only make edits where the template code mentions.

Solution should ensure that any passed in array will have its values summed AND the final result

Requires at least 2 screenshots (code + output from terminal)

## #1) Screenshot the output of the solved problem



```
| jay@DESKTOP-SICG#N MING#64 ~/jah89-IT114-450 (M2-Java-Problems)
| $ java M2.Problem2 | 10.801, 11.501, 0.811, 5.991, 16.121, 0.131, 100.981, 1.001] | Processing Array:[10.801, 11.501, 0.811, 100.981, 1.001] | Adding output as two decimal places...
| Find process from Array:[1.99, 1.99, 0.99, 1.99, 0.99, 1.99, 0.99] | Adding values to total variable | Displaying output as two decimal places... | Total is 11.02 | End process | Processing Array:[0.1, 0.01, 0.01, 0.01, 0.01, 0.01] | Adding values to total variable | Displaying output as two decimal places... | Processing Array:[0.1, 0.01, 0.01, 0.01, 0.01, 0.01] | Adding values to total variable | Displaying output as two decimal places... | Processing Array:[10.01, -12.22, 0.23, 19.2, -5.13, 3.12] | Adding values to total variable | Displaying output as two decimal places... | Displaying output as two decimal places... | Total is 15.21 | End process | | Index | In
```

## Caption (required) <

Describe/highlight what's being shown SHowing output for Problem2

#2) Screenshot the code solution (ucid/date must be included as a comment)



#### Caption (required) <

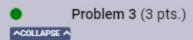
Describe/highlight what's being shown Code for Problem2

#### Explanation (required) <

Explain in concise steps how this logically works



For the first part of the problem I wrote the message "Adding values to total variable" to make the readability better in the terminal when I run the program. I then used a for each loop to iterate through the array. I then used total += num to add the current element of the array to the variable total. This will add every element of the array and just put it into the variable total giving me the sums of the values. For the second part I wrote a print message to show displaying output as two decimal places. I then took the variable totalOutput and used String.format to show the double rounded to two decimal places. I used %.2f because the % is the start of the formatting and the .2 represents the two decimal places and then the f to represent a floating number. Then it is assigned to the totalOutput variable.





Task #1 - Points: 1

Text: Screenshot of the Problem 2 Solved Code and Output

Details:

Only make edits where the template code mentions.

Solution should ensure that any passed in array will have its values converted to a positive version of the value AND converted back to the original data type.

Requires at least 2 screenshots (code + output from terminal)

# #1) Screenshot the output of the solved problem



```
** ** java M2. Problems

Processing Array: [-1, -2, -3, -4, -5, -6, -7, -8, -9, -10]

Making each value positive

Assigning each value to the output array in the same index as the original data type

Reculting (1), 2 (1), 4 (1), 4 (1), 5 (1), 6 (1), 7 (1), 8 (1), 9 (1), 18 (1)

Making each value positive

Assigning each value to the output array in the same index as the original data type

Result: (2), 4 (1), 2 (1), 2 (3), 2 (3), 4 (3), 5 (1)

Processing Array: [ 8.63. 3.66. 4. -0.35]

Assigning each value to the output array in the same index as the original data type

Result: 0.01 (0), 1.05-4 (0), 0.15 (0)

Processing Array: [ -1, 2, -3, 4, -5, 5, -6, 6, -7, 7]

Making each value to the output array in the same index as the original data type

Result: 0.01 (0), 1.05-4 (0), 0.15 (0)

Processing Array: [ -1, 2, -3, 4, 5, 5, -6, 6, -7, 7]

Making each value positive

Assigning each value to the output array in the same index as the original data type

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Making each value to the output array in the same index as the original data type

Making each value to the
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# Caption (required) ~

Describe/highlight what's being shown

The output for problem 3 making each value positive

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hebruitive(at);
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```

# Caption (required) <

Describe/highlight what's being shown Showing code solution to problem3

# Explanation (required) ~

Explain in concise steps how this logically works

PREVIEW RESPONSE

I created a for loop to iterate through each element of the array which is called "arr". I then wanted to check the data type so I made the variable "value" to store the current element from array and used InstanceOf to check the data type of the element. I made sure if it was a double or an integer to make sure to take its absolute value by using Math.abs(). I then store these values in the output array. If the element is a string it checks for a "-" which would show the element is negative and then use strValue.substring(1) which is first index which would remove the negative sign from the string. All these values are stored in the output array at the same index.





Task #1 - Points: 1

Text: Reflect on your experience

# Details:

Talk about any issues you had, how you resolved them, and anything you learned during this process.

Provide concrete details/examples. At least a few sentences.

## Response:

I had a little trouble with problem3 I wasn't too familiar with handling data types properly, but watched a couple of youtube tutorials and got the hang of it and learned more about using "instanceof" to check data types. Besides those issues for problem 1 and 2 I had no issues and was able to refresh an my issue skills and propers myself for barder.

tasks coming up.	
^COLLAPSE ↑	Task #2 - Points: 1 Text: Include the pull request link for this branch
① Details: The correct link will end with /pull/ and a number.	
URL #1 https://g	ithub.com/jah89/jah89-IT114-450/pull/4
^COLLAPSE ^	Task #3 - Points: 1 Text: Add Screenshot of Wakatime
① Details:  Note: The duration of time isn't directly related to the grade, the goal is to just make sure time is being tracked	
Task Scree	nshots:  Gallery Style: Large View
	Small Medium Large
Pi	rojects • jah89-IT114-450
2 h	rs 14 mins over the Last 7 Days in jah89-IT114-450 under all branches. 🗅

## How much time spent over past 7 days

# **Files**

1 hr 16 mins M2/Problem3.java

29 mins M2/Problem2.java

25 mins M2/Problem1.java

3 mins .gitignore

2 secs ...started\_IT114-450-M2024.pdf

How much time spent on each file

**End of Assignment**