

Course: IT114-010-S2025

Assignment: IT114 Java Problems

Student: Matt T. (mt85)

Status: Submitted | Worksheet Progress: 100.00%

Potential Grade: 10.10/10.00 (101.00%)

Received Grade: 0.00/10.00 (0.00%)

Grading Link: <https://learn.ethereallab.app/assignment/v3/IT114-010-S2025/it114-java-problems/grading/mt85>

Instructions

1. Ensure you read all instructions and objectives before starting.
2. Create a new branch from `main` called `M2-Homework`
 1. `git checkout main` (ensure proper starting branch)
 2. `git pull origin main` (ensure history is up to date)
 3. `git checkout -b M2-Homework` (create and switch to branch)
3. Copy the template code from here: [GitHub Repository - M2 Homework](#)
 - It includes Problems 1-4 and a `BaseClass`. Put all into an `M2` folder or similar (adjust package reference at the top if you chose a different folder name).
 - Immediately record to history
 - ☐ `git add .`
 - ☐ `git commit -m "adding M2 HW baseline files"`
 - ☐ `git push origin M2-Homework`
 - ☐ Create a Pull Request from `M2-Homework` to `main` and keep it open
4. Fill out the below worksheet
 - Each Problem requires the following as you work
 - ☐ Ensure there's a comment with your UCID, date, and brief summary of how the problem was solved
 - ☐ Initial outline/plan of how you'll solve it via comments (add/commit after this stage)
 - ☐ Code solution (add/commit periodically as needed)
5. Once finished, click "Submit and Export"
6. Locally add the generated PDF to a folder of your choosing inside your repository folder and move it to Github
 1. `git add .`
 2. `git commit -m "adding PDF"`
 3. `git push origin M2-Homework`
 4. On Github merge the pull request from `M2-Homework` to `main`
7. Upload the same PDF to Canvas
8. Sync Local
 1. `git checkout main`
 2. `git pull origin main`

Section #1: (2 pts.) Problem 1 - Odds

Task #1 (2 pts.) - Edit the `printOdds` method to output odd values

Combo Task:

Weight: 100%

Objective: Edit the `printOdds` method to output odd values of the array

Details:

- Only make edits where noted via provided comments
- Challenge: Print odd values only in a single line separated by commas
- Step 1: sketch out plan using comments (include ucid and date)
- Step 2: Add/commit your outline of comments (required for full credit)
- Step 3: Add code to solve the problem (add/commit as needed)

Item:#1

Weight: 40%

Details:

Two screenshots are expected

1. Snippet of relevant code showing solution (with ucid/date comment)
2. Full output of executing the program

≡ Image Prompt

```
8 private static void printOdds(int[] arr, int arrayNumber) {
9     // Only make edits between the designated "Start" and
10    printArrayInfo(arr, arrayNumber);
11
12    // Challenge: Print odd values only in a single line
13    // Step 1: sketch out plan using comments (include ucid
14    // Step 2: Add/commit your outline of comments (requir
15    // Step 3: Add code to solve the problem (add/commit
16    System.out.print(s:"Output Array: ");
17    // Start Solution Edits
18
19    // Step 1: iterate over arr
20    // Step 2: check if value is odd
21    // Step 3: print value
22
23
24    // End Solution Edits
25    System.out.println(s:"");
26    System.out.println(s:"");
27 }
```

showing code for problem 1

```
Running Problem 1 for [MRS] [2895-B2-13T18:05:52.995729600]
Objective: Print out only odd values in a single line separate by commas
Problem 1: Original Array: [0, 1, 2, 3, 4, 5, 6, 7, 8, 9]
Output Array:
Problem 2: Original Array: [9, 8, 7, 6, 5, 4, 3, 2, 1, 0]
Output Array:
```

Problem 3: Original Array: [0, 0, 1, 1, 2, 2, 3, 3, 4, 4, 5, 5, 6, 6, 7, 7, 8, 8, 9, 9]
Output Array:
Problem 4: Original Array: [9, 9, 8, 8, 7, 7, 6, 6, 5, 5, 4, 4, 3, 3, 2, 2, 1, 1, 0, 0]
Output Array:
Completed Problem 1 for [mt85] [2025-02-13T18:05:53.000421]

Showing output for problem 1

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Item:#2

Weight: 20%

Details:

Direct link to the file in the homework related branch from Github (should end in `.java`)

≡ Url Prompt

URL #1

[https://github.com/MattToegel/
IT114-2025M2-Homework/M2/Problem1.java](https://github.com/MattToegel/IT114-2025M2-Homework/M2/Problem1.java)



URL

<https://github.com/MattToegel/IT1>

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Item:#3

Weight: 40%

Details:

Briefly explain `how` the code solves the challenge (note: this isn't the same as `what` the code does)

≡ Text Prompt

Your Response:

I used xyz to check that it's odd and used abc to print it

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Task #1 (2 pts.) - Edit the `sumValues` method to sum the array values

Combo Task:

Weight: 100%

Objective: Edit the `sumValues` method to sum the array values and present them in a format with exactly two decimal places

Details:

- Only make edits where noted via provided comments
- Challenge 1: Sum all the values of the passed in array and assign to `total`
- Challenge 2: Have the sum be represented as a number with exactly 2 decimal
- Example: 0.1 would be shown as 0.10, 1 would be shown as 1.00, etc
- Step 1: sketch out plan using comments (include ucid and date)
- Step 2: Add/commit your outline of comments (required for full credit)
- Step 3: Add code to solve the problem (add/commit as needed)

Item:#1

Weight: 40%

Details:

Two screenshots are expected

1. Snippet of relevant code showing solution (with ucid/date comment)
2. Full output of executing the program

Image Prompt

```
1 1
2 2
3 3
4 4
5 5
6 6
7 7
8 8
9 9
10 10
11 11
12 12
13 13
14 14
15 15
16 16
17 17
18 18
19 19
20 20
21 21
22 22
23 23
24 24
25 25
26 26
27 27
28 28
29 29
30 30
31 31
32 32
33 33
34 34
35 35
36 36
37 37
38 38
39 39
40 40
41 41
42 42
43 43
44 44
45 45
46 46
47 47
48 48
49 49
50 50
```

```
5 // Challenge 1: Sum all the values of the passed in array
6 // Challenge 2: Have the sum be represented as a number with exactly 2 decimal
7 // Example: 0.1 would be shown as 0.10, 1 would be shown as 1.00, etc
8 // Step 1: sketch out plan using comments (include ucid and date)
9 // Step 2: Add/commit your outline of comments (required for full credit)
10 // Step 3: Add code to solve the problem (add/commit as needed)
11 double total = 0;
12 // Create Challenge 1 item
13 // Solve Challenge 1 item
14
15 // Step 1
16 // Step 2
17 // Step 3
18
19 // Solve Challenge 2 item
20 Object modifiedTotal = "0";
21
22 // End solution class
23 System.out.println("Total Raw Values: " + total);
24 System.out.println("Total modified value: " + modifiedTotal);
25 System.out.println("");
26 System.out.println("");
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
```

Showing code for p2



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Section #3: (2 pts.) Problem 3 - Conversion

Task #1 (2 pts.) - Edit the `bePositive` method to make each value

Combo Task:

Weight: 100%

Objective: Edit the `bePositive` method to make each value positive, convert it back to the original data type, and set it to the proper slot in the `output` array

Details:

- Only make edits where noted via provided comments
- Challenge 1: Make each value positive
- Challenge 2: Convert the values back to their original data type and assign it to the proper slot of the `output` array
- Step 1: sketch out plan using comments (include ucid and date)
- Step 2: Add/commit your outline of comments (required for full credit)
- Step 3: Add code to solve the problem (add/commit as needed)

Item:#1

Weight: 40%

Details:

Two screenshots are expected

1. Snippet of relevant code showing solution (with ucid/date comment)
2. Full output of executing the program

⇒ Image Prompt

```
11 // challenge 1: Make each value positive
12 private static void bePositive(Object[] arr, int arrayNumber) {
13     // Only make edits between the designated "Start" and "End" comments
14     printArrayInfo(arr, arrayNumber);
15
16     // challenge 1: Make each value positive
17     // Challenge 2: Convert the values back to their original data type and assign
18     // it to the proper slot of the "output" array
19     // Step 1: Sketch out plan using comments (include ucid and date)
20     // Step 2: Add/commit your outline of comments (required for full credit)
21     // Step 3: Add code to solve the problem (add/commit as needed)
22     Object[] output = new Object[arr.length];
23     // Start Solution Edits
24
25     // step 1
26     // step 2
27     // step 3
28
29     // End Solution Edits
30     System.out.println("Output: ");
31     printOutputWithInfo(output);
32     System.out.println("UCID:");
33     System.out.println("Date:");
34 }
```

showing code for n3

Showing code for p0

```
import java.util.*;
import java.io.*;
import java.math.*;

public class Problem3 {
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);
        int n = scanner.nextInt();
        int m = scanner.nextInt();
        int k = scanner.nextInt();
        int[] arr = new int[n];
        for (int i = 0; i < n; i++) {
            arr[i] = scanner.nextInt();
        }
        // ... (rest of the code) ...
    }
}
```

Showing output for p3

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Item:#2

Weight: 20%

Details:

Direct link to the file in the homework related branch from Github (should end in `.java`)

⇒ Url Prompt

URL #1

[https://github.com/MattToegel/
IT114-2025-M2-Homework/M2/Problem3.java](https://github.com/MattToegel/IT114-2025-M2-Homework/M2/Problem3.java)



URL

<https://github.com/MattToegel/IT114-2025-M2-Homework/M2/Problem3.java>

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Item:#3

Weight: 40%

Details:

Briefly explain `how` the code solves the challenges (note: this isn't the same as `what` the code does)

⇒ Text Prompt

Your Response:

qweqwewq ewqe qwe

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≡ Image Prompt

showing code for p4

```
// Problem 4: The Game of Life
// The Game of Life is a cellular automaton simulation. It is played on a grid of cells, each of which is either alive (1) or dead (0).
// The rules of the game are as follows:
// 1. Any live cell with two or three live neighbors survives.
// 2. Any dead cell with three live neighbors becomes a live cell.
// 3. All other cells die or stay dead.
// Your task is to write a function that takes a 2D array of 0s and 1s and returns a new 2D array representing the next state of the game.
// Example:
// Input:
// 1 0 1
// 0 1 0
// 1 1 0
// Output:
// 0 1 0
// 1 1 1
// 1 0 0
```

showing output for p4

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Item:#2

Weight: 20%

Details:

Direct link to the file in the homework related branch from Github (should end in `.java`)

Url Prompt

URL #1

[https://github.com/MattToegel/
IT114-2025M2-Homework/M2/Problem4.java](https://github.com/MattToegel/IT114-2025M2-Homework/M2/Problem4.java)



URL

<https://github.com/MattToegel/IT1>

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Item:#3

Weight: 40%

Details:

Briefly explain `how` the code solves the challenges (note: this isn't the same as `what` the code does)

Text Prompt

Your Response:



Task #2 (+ 0.90 pts.) - Edit the `transformText` method to solve the

Combo Task:

Weight: 45%

Objective: Edit the `transformText` method to solve the extra credit challenge (challenge 4)

Details:

- Only make edits where noted via provided comments
- Challenge 4: Extract middle 3 characters (beginning starts at middle of phrase)
- Assign result to 'placeholderForMiddleCharacters'
- If not enough characters assign "Not enough characters"
- Step 1: sketch out plan using comments (include ucid and date)
- Step 2: Add/commit your outline of comments (required for full credit)
- Step 3: Add code to solve the problem (add/commit as needed)

Item:#1

Weight: 40%

Details:

Two screenshots are expected

1. Snippet of relevant code showing solution (with ucid/date comment)
2. Full output of executing the program

≡ Image Prompt



Missing Caption





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Item:#3

Weight: 50%

Details:

Briefly explain **how** the code solves the extra credit challenge (note: this isn't the same as **what** the code does)

≡ Text Prompt

Your Response:

Missing Response



Not saved yet

Section #5: (2 pts.) Misc

Task #1 (0.67 pts.) - Github Details

Combo Task:

Weight: 33.33%

Objective: Github Details

Item:#1

Weight: 60%

Details:

From the Commits tab of the Pull Request screenshot the commit history Following minimum should be present

Image Prompt

adding m2 hw baseline files # /

13 Open MattToegel wants to merge 6 commits into `main` from `hw-baseline`: p2

Conversation (0) Commits (6) Checks (0) Files changed (0) 1.1.1 000000

Commits on Feb 12, 2025

adding m2 hw baseline files	MattToegel committed 24 minutes ago	main	000000
Added solution outline	MattToegel committed 19 minutes ago	main	000000
outline comment for p2	MattToegel committed 14 minutes ago	main	000000
adding outline for p3	MattToegel committed 10 minutes ago	main	000000
outline for p3	MattToegel committed 4 minutes ago	main	000000
added forgotten comment	MattToegel committed now	main	000000

showing I have most appropriate commits

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Item:#2

Weight: 40%

Details:

Include the link to the Pull Request (should end in `/pull/#`)

Url Prompt

URL #1

[https://github.com/MattToegel/
IT114-p0125/](https://github.com/MattToegel/IT114-p0125/)



URL

<https://github.com/MattToegel/IT1>

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Task #2 (0.00 / 0.67 pts.) - WakaTime - Activity

Weight: 33.33%

Objective: *WakaTime - Activity*

Details:

- Visit the WakaTime.com Dashboard
- Click **Projects** and find your repository
- Capture the overall time at the top that includes the repository name
- Capture the individual time at the bottom that includes the file time
- Note: The duration isn't relevant for the grade and the visual graphs aren't necessary

Projects - IT114-2025

total 4 hrs 30 mins

5 hrs 1 min over the Last 7 Days in IT114-2025 under all branches. 5

showing overall time

[illegible]

Showing individual time

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Task #3 (0.00 / 0.67 pts.) - Reflection

Sub-Tasks:

Task #1 (0.00 / 0.33 pts.) - What did you learn?

Weight: 33.33%

Objective: *What did you learn?*

Details:

Briefly answer the question (at least a few decent sentences)

Your Response:

tfgyhkjlll



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Task #2 (0.00 / 0.33 pts.) - What was the easiest part of the assignment?

Weight: 33.33%

Objective: *What was the easiest part of the assignment?*

Details:

Briefly answer the question (at least a few decent sentences)

≡ Text Prompt

Your Response:

qwewqe



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Task #3 (0.00 / 0.33 pts.) - What was the hardest part of the assignment?

Weight: 33.33%

Objective: *What was the hardest part of the assignment?*

Details:

Briefly answer the question (at least a few decent sentences)

≡ Text Prompt

Your Response:

qwe qew



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