

# Submission Worksheet

## Submission Data

**Course:** IT114-007-F2025

**Assignment:** IT114 Java Problems

**Student:** Karen R. (kar65)

**Status:** Submitted | **Worksheet Progress:** 100+%

**Potential Grade:** 10.86/10.00 (108.60%)

**Received Grade:** 0.00/10.00 (0.00%)

**Started:** 9/30/2025 9:11:17 PM

**Updated:** 9/30/2025 10:37:58 PM

**Grading Link:** <https://learn.ethereallab.app/assignment/v3/IT114-007-F2025/it114-java-problems/grading/kar65>

**View Link:** <https://learn.ethereallab.app/assignment/v3/IT114-007-F2025/it114-java-problems/view/kar65>

## Instructions

- Overview Link: <https://youtu.be/Mrahk6SFYao>

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 merge M2-Homework`

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

Progress: 100%

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

Progress: 100%

## 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)

## Part 1:

Progress: 100%

## Details:

Two screenshots are expected

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

```
java OddValues
oddValues [1,2,3,4,5,6,7,8,9]
1,3,5,7,9
```

Problem 1 output

```
/*
 * Name: [REDACTED]
 * Date: [REDACTED]
 */
public class OddValues {
    public static void main(String[] args) {
        printOdds();
    }

    public static void printOdds() {
        int[] arr = {1, 2, 3, 4, 5, 6, 7, 8, 9};
        for (int i = 0; i < arr.length; i++) {
            if (arr[i] % 2 != 0) {
                System.out.print(arr[i] + ",");
            }
        }
    }
}

/*
 * Copyright 2023 [REDACTED]
 */

```

Code1 snippet



Saved: 9/30/2025 9:30:54 PM

## ☞ Part 2:

Progress: 100%

### Details:

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

### URL #1

<https://github.com/Kralda777/Kar65->

IT114-007~~2025M2-~~

Homework/M2/Problem1.java



1

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

0

## Part 1:

Progress: 100%

## Details:

**Two screenshots are expected**

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

## Code 2 snippet

## Problem 2 output



Saved: 9/30/2025 9:43:16 PM

⊕ Part 2:

Progress: 100%

## Details:

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

URL #1

[https://github.com/Kralda777/Kar65-IT114-007-~~2025M2~~-Homework/M2/Problem2.java](https://github.com/Kralda777/Kar65-IT114-007-<del>2025M2</del>-Homework/M2/Problem2.java)



UR

<https://github.com/Kralda777/Kai>



Saved: 9/30/2025 9:43:16 PM

Part 3:

Progress: 100%

#### **Details:**

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

### Your Response:

Got the sum of all the numbers in the array. Added "5.2f" floating number with 2 digits after the decimal.. created string.



Saved: 9/30/2025 9:43:16 PM

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

Progress: 100%

≡ Task #1 ( 2 pts.) - Edit the `bePositive` method to make each value positive, convert it back to the orginal data type, and set it to the proper slot in the `output` array

Progress: 100%

## 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)

## Part 1:

Progress: 100%

## Details:

**Two screenshots are expected**

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

```

    resolution as original image
    2.141026309295701[D], 2.7182813320201[D], 1.01952268772[D], -0.277731200161[D], 1.08771[D], -10000000.0[D]

```

code 3 output

```
3     protected int[] calculateMultiplication(int[] array1, int[] array2) {
4         int[] result = new int[array1.length + array2.length - 1];
5         // Initialize result with zeros
6         for (int i = 0; i < result.length; i++) {
7             result[i] = 0;
8         }
9         // Loop through array1
10        for (int i = 0; i < array1.length; i++) {
11            // Loop through array2
12            for (int j = 0; j < array2.length; j++) {
13                // Add the multiplication result to the result array
14                result[i + j] += array1[i] * array2[j];
15            }
16        }
17        return result;
18    }
19
20    // Returns true when
21    // 1. the array contains only positive numbers
22    // 2. all elements in the array are of type int
23    // 3. both abs() and isPositive() methods work correctly
24    // 4. the sum of all elements in the array is equal to the sum of the absolute values of the elements
25    private boolean isPositive(int[] array) {
26        if (array == null) {
27            throw new IllegalArgumentException("The array cannot be null");
28        }
29        for (int value : array) {
30            if (value < 0) {
31                return false;
32            }
33        }
34        return true;
35    }
36
37    // Returns the absolute value of the given number
38    private int absoluteValue(int value) {
39        if (value < 0) {
40            return -value;
41        } else {
42            return value;
43        }
44    }
45
46    // Returns true when
47    // 1. the array contains only positive numbers
48    // 2. all elements in the array are of type int
49    // 3. both abs() and isPositive() methods work correctly
50    // 4. the sum of all elements in the array is equal to the sum of the absolute values of the elements
51    private boolean isPositive(int[] array) {
52        if (array == null) {
53            throw new IllegalArgumentException("The array cannot be null");
54        }
55        for (int value : array) {
56            if (value < 0) {
57                return false;
58            }
59        }
60        return true;
61    }
62
63    // Returns the absolute value of the given number
64    private int absoluteValue(int value) {
65        if (value < 0) {
66            return -value;
67        } else {
68            return value;
69        }
70    }
71
72    // Returns true when
73    // 1. the array contains only positive numbers
74    // 2. all elements in the array are of type int
75    // 3. both abs() and isPositive() methods work correctly
76    // 4. the sum of all elements in the array is equal to the sum of the absolute values of the elements
77    private boolean isPositive(int[] array) {
78        if (array == null) {
79            throw new IllegalArgumentException("The array cannot be null");
80        }
81        for (int value : array) {
82            if (value < 0) {
83                return false;
84            }
85        }
86        return true;
87    }
88
89    // Returns the absolute value of the given number
90    private int absoluteValue(int value) {
91        if (value < 0) {
92            return -value;
93        } else {
94            return value;
95        }
96    }
97
98    // Returns true when
99    // 1. the array contains only positive numbers
100   // 2. all elements in the array are of type int
101   // 3. both abs() and isPositive() methods work correctly
102   // 4. the sum of all elements in the array is equal to the sum of the absolute values of the elements
103   private boolean isPositive(int[] array) {
104       if (array == null) {
105           throw new IllegalArgumentException("The array cannot be null");
106       }
107       for (int value : array) {
108           if (value < 0) {
109               return false;
110           }
111       }
112       return true;
113   }
114
115   // Returns the absolute value of the given number
116   private int absoluteValue(int value) {
117       if (value < 0) {
118           return -value;
119       } else {
120           return value;
121       }
122   }
123 }
```

### **Code 3 code**



Saved: 9/30/2025 9:48:19 PM

⊖ Part 2:

Progress: 100%

## Details:

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

URI #1

<https://github.com/Kralda777/Kar65->

IT114-007-1025M2-

Homework/M2/Problem3.java



URL

<https://github.com/Kralda777/Kai>



Saved: 9/30/2025 9:48:19 PM

≡, Part 3:

Progress: 100%

## Details:

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

---

**Your Response:**

Used loop. Used instance to check the type. Used Math make integers positive.

If (value instanceof Integer) { int positive = Matho.abs ((int) value); out [i] = Integer.valueOf(positive); This turned it into positive. Saved the result in new array called Output.



# Section #4: ( 2 pts.) Problem 4 - Strings

Progress: 97%

≡ Task #1 ( 2 pts.) - Edit the `transformText` method to solve the challenges

Progress: 94%

**Details:**

- Only make edits where noted via provided comments
- Challenge 1: Remove non-alphanumeric characters except spaces
- Challenge 2: Convert text to Title Case
- Challenge 3: Trim leading/trailing spaces and remove duplicate spaces
- Result 1-3: Assign final phrase to `placeholderForModifiedPhrase`
- 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)

**Part 1:**

Progress: 83%

**Details:**

Two screenshots are expected

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



Missing Caption

```
git pull origin main; git status -s
  ✓ problem4.java M  ✓ mainmenu.java M  ✓ user.java M  ✓ problem4.java M  ✓ mainmenu.java M  ✓ user.java M  ✓ problem4.java M  ✓ mainmenu.java M  ✓ user.java M
> ✓ problem4.java M  ✓ mainmenu.java M  ✓ user.java M  ✓ problem4.java M  ✓ mainmenu.java M  ✓ user.java M  ✓ problem4.java M  ✓ mainmenu.java M  ✓ user.java M
public class Main {
    public static void main(String[] args) {
        placeholderStatic void transformText(String[] args, int argc) {
            //Step 1
            //Challenge 1
            if(args.length < 2) standardFormatting();
            else placeholderForModifiedPhrase = titledToString();
            //Step 2
            //Challenge 2
            if(argc > 1) start = 1;
            else start = 0;
            if(start == 0) start = 1; //Skipping first character
            if(start < argc) start = 0; //Skipping first character
            end = Math.max(start + 2, argc - 1);
            if(end < start) {
                placeholderForMiddleCharacters = "not enough characters";
            } else {
                placeholderForMiddleCharacters = substring(start, end);
            }
            //Step 3
            //Challenge 3
            if(argc > 1) middle = placeholderForMiddleCharacters;
            else middle = "";
            placeholderForModifiedPhrase = String.format("%s%s%s", placeholderForMiddlePhrase, placeholderForMiddleCharacters, middle);
        }
    }
}
// Main.java: line 1: warning: unused variable 'argc' defined.
// End of build 10
System.out.println(String.format("Index(%d) %s(%d), placeholderForModifiedPhrase, placeholderForMiddlePhrase))
```

code 4 code 3/3

code 4 code 2/3

code 4 code 1/3

code 4 output 1/2

code output 2/2



Saved: 9/30/2025 10:07:30 PM

⊕ Part 2:

**Details:**

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

URL #1

[https://github.com/Kralda777/Kar65-IT114-007\\_2025M2-Homework/M2/Problem4.java](https://github.com/Kralda777/Kar65-IT114-007_2025M2-Homework/M2/Problem4.java)


URL

[https://github.com/Kralda777/Kar65-IT114-007\\_2025M2-Homework/M2/Problem4.java](https://github.com/Kralda777/Kar65-IT114-007_2025M2-Homework/M2/Problem4.java)

Saved: 9/30/2025 10:07:30 PM

**Part 3:****Details:**

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

Your Response:

replaceAll("[^A-Za-z0-9]" to remove all alphanumericals, but keeping the spaces. Then trimmed it using cleaned.trim() I then created a title case. Then I removed all spaces at the beginning and end and again used replaceAll to remove duplicates. I used word.length to determine the middle character.

Saved: 9/30/2025 10:07:30 PM

**Task #2 (+ 1.11 pts.) - 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 uid 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)

**Part 1:**

## Details:

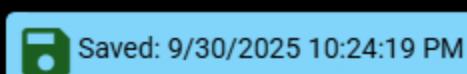
**Two screenshots are expected**

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

code XTRA credit

### code 4 output Extra credit

### code 4 output Extra Credit



≡, Part 2:

Progress: 100%

#### Details:

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

**Your Response:**

Solved by Index checking int n = s.length() Divides my string by 2 to get to the middle Solved by adding a placeholderholderForMiddleCharacters = Not enough characters Handles strings that aren't long enough



| Saved: 9/30/2025 10:24:19 PM

### Section #5: ( 2 pts.) Misc

Progress: 100%

≡ Task #1 ( 0.67 pts.) - Github Details

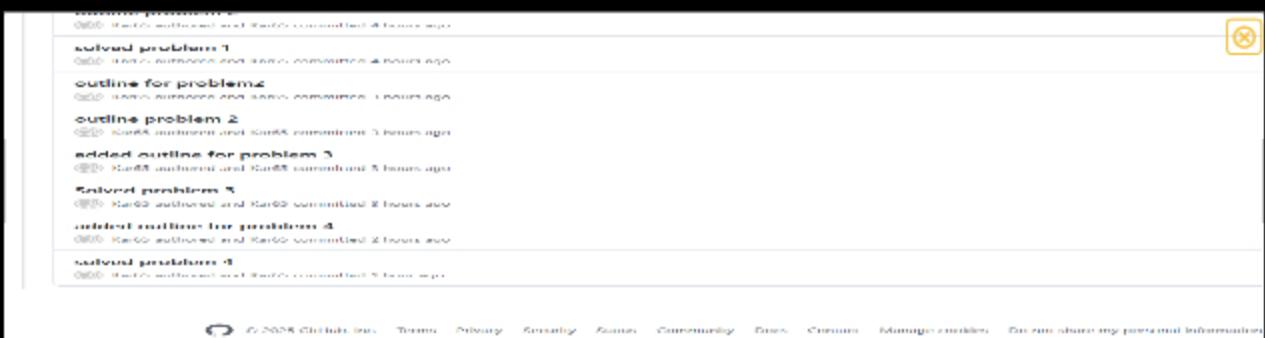
Progress: 100%

Part 1:

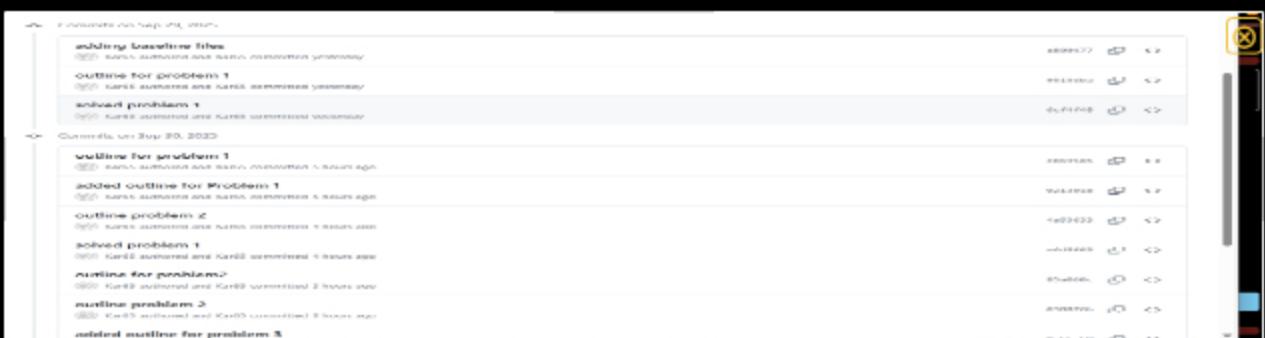
Progress: 100%

#### **Details:**

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



commits for hw 1/2



commits for hw 2/2



Saved: 9/30/2025 10:29:33 PM

⊕ Part 2:

Progress: 100%

#### **Details:**

Deadline:

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

URL #1

<https://github.com/Kralda777/Kar65-IT114-007-2025/>



URL

<https://github.com/Kralda777/Kar65-IT114-007-2025/>



Saved: 9/30/2025 10:29:33 PM

## ▣ Task #2 ( 0.67 pts.) - WakaTime - Activity

Progress: 100%

### 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

### Files

1 hr 55 mins	M2/Problem4.java
1 hr 16 mins	M2/Problem1.java
1 hr 5 mins	M2/Problem3.java
59 mins	M2/Problem2.java
3 mins	M2/BaseClass.java
1 min	...-1-checkpoint_09-16-2025_15-58-56.pdf
49 secs	M2/Problem1.class
41 secs	M2/Problem1

individual

Projects • Kar65-IT114-007-2025

total 5 hrs 18 mins



5 hrs 23 mins over the [Last 7 Days](#) in Kar65-IT114-007-2025 under [all](#) branches. ⚡

overall



Saved: 9/30/2025 10:32:21 PM

## ☰ Task #3 ( 0.67 pts.) - Reflection

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

Progress: 100%

**Details:**

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

Your Response:

I learned a lot with this assignment. The whole set up was new to me and lengthy process that helped me learn to move around. I learned how to extract middle characters. I learned how to handle duplicates in arrays. Overall with all four problems I learned how to handle my outputs and be able to recognize patterns.



Saved: 9/30/2025 10:35:55 PM

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

Progress: 100%

**Details:**

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

Your Response:

The easiest part of the assignment was the steps that we had to create before starting the code, that helped.



Saved: 9/30/2025 10:36:36 PM

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

Progress: 100%

**Details:**

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

Your Response:

The hardest part of the assignment was the beginning before getting the hang of it, also learning while working. That is why problem 1 was the toughest for me.

because I was learning how to formatting work, the video helped a lot. Notes, and trials and errors.



Saved: 9/30/2025 10:37:58 PM