# Submission Worksheet

## Submission Data

**Course:** IT114-003-F2025
**Assignment:** IT114 Module 3 User Input Challenges
**Student:** Laura L. (lsl8)
**Status:** Submitted | **Worksheet Progress:** 100%
**Potential Grade:** 10.00/10.00 (100.00%)
**Received Grade:** 0.00/10.00 (0.00%)
**Started:** 10/13/2025 6:45:44 PM
**Updated:** 10/13/2025 8:13:56 PM
**Grading Link:** https://learn.ethereallab.app/assignment/v3/IT114-003-F2025/it114-module-3-user-input-challenges/grading/lsl8
**View Link:** https://learn.ethereallab.app/assignment/v3/IT114-003-F2025/it114-module-3-user-input-challenges/view/lsl8

## Instructions

- Overview Link: https://youtu.be/iowHMCKuj5o

1. Ensure you read all instructions and objectives before starting.
2. Create a new branch from `main` called `M3-Homework`
    1. `git checkout main` (ensure proper starting branch)
    2. `git pull origin main` (ensure history is up to date)
    3. `git checkout -b M3-Homework` (create and switch to branch)
3. Copy the template code from here: GitHub Repository - M3 Homework
    - It includes CommandLineCalculator, SlashCommandHandler, MadLibsGenerator, a BaseClass and a stories folder with 5 stories (used for MadLibsGenerator). Put all into an `M3` 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 M3 HW baseline files"`
        - `git push origin M3-Homework`
        - Create a Pull Request from `M3-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
        - Update the `ucid` variable
        - 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 M3-Homework`
    4. On Github merge the pull request from `M3-Homework` to `main`

7. Upload the same PDF to Canvas
8. Sync Local
    1. `git checkout main`
    2. `git pull origin main`

# Section #1: ( 3 pts.) Challenge 1 - Command Line Calculator (Add/sub)

Progress: 100%

## ☰ Task #1 ( 3 pts.) - Edit the `main` method to solve the requirements

Progress: 100%

**Details:**

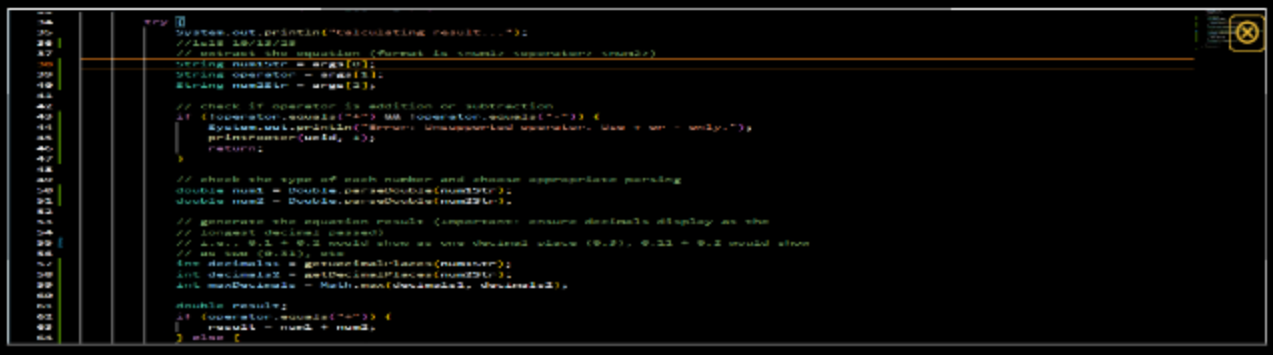
- Don't adjust the give code unless noted
- Challenge 1: Accept two numbers and an operator as command-line arguments (+ and -)
- Challenge 2: Allow integer and floating-point numbers
    - Ensure correct decimal places in output based on input (e.g., 0.1 + 0.2 → 1 decimal place)
- Display an error for invalid inputs or unsupported operators
- Add code to solve the problem (add/commit as needed)

### 🖼 Part 1:

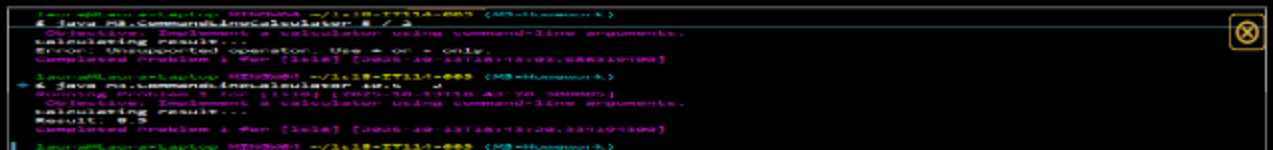
Progress: 100%

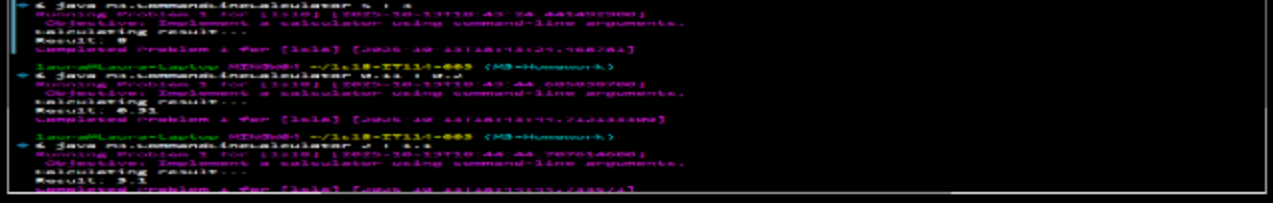
**Details:**
Two screenshots are expected

1. Snippet of relevant code showing solution (with ucid/date comment)
2. Full output of executing the program (Capture 5 variations of tests)

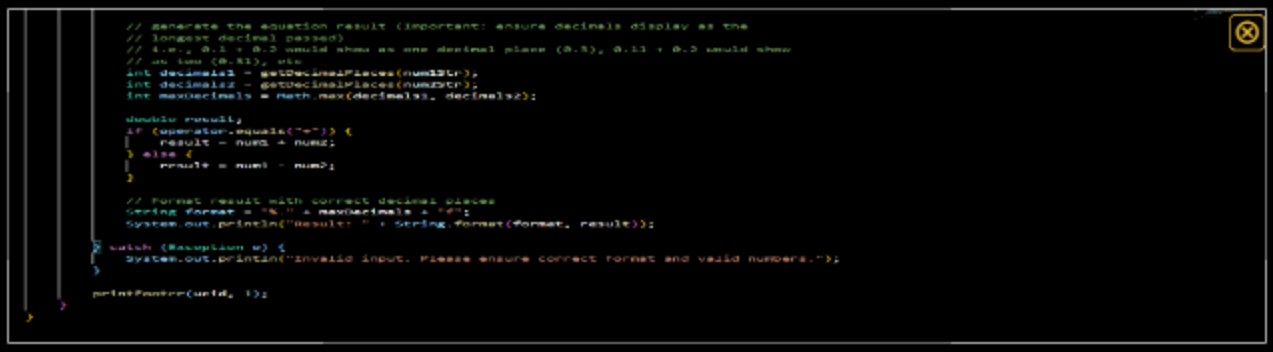


Code





Output



```
        // generate the equation result (important: ensure decimals display as the
        // longest decimal passed)
        // i.e., 0.1 + 0.2 would show as one decimal place (0.3), 0.11 + 0.2 would show
        // as two (0.31), etc
        int decimals1 = getDecimalPlaces(num1Str);
        int decimals2 = getDecimalPlaces(num2Str);
        int maxDecimals = Math.max(decimals1, decimals2);

        double result;
        if (operator.equals("+")) {
            result = num1 + num2;
        } else {
            result = num1 - num2;
        }

        // Format result with correct decimal places
        String format = "%." + maxDecimals + "f";
        System.out.println("Result: " + String.format(format, result));

    } catch (Exception e) {
        System.out.println("Invalid input. Please ensure correct format and valid numbers.");
    }

    printFooter(uid, 1);
    }
}
```

Code 2

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## 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/laurasofia544/lsl8-IT114-003/M3-Homework/M3/CommandLineCalculator.java

URL
https://github.com/laurasofia544/

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## Part 3:

Progress: 100%

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

Your Response:

The code solves the challenge by taking numbers and an operator from the command line, doing the right math, and showing the result. It also makes sure the input is valid and keeps the same number of decimal places as the numbers entered.

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# Section #2: ( 3 pts.) Challenge 2 - Slash Command Handler

Progress: 100%

## ☰ Task #1 ( 3 pts.) - Edit the `main` method to solve the requirements

Progress: 100%

**Details:**

- Don't adjust the give code unless noted
- Challenge 1: Accept user input as slash commands (Commands are case-insensitive)
  - `"/greet <name>" → Prints "Hello, <name>!"`
  - `"/roll <num>d<sides>" → Roll <num> dice with <sides> and returns a`
  - `"/echo <message>" → Prints the message back`
  - `"/quit" → Exits the program`
- Challenge 2: Print an error for unrecognized commands
- Challenge 3: Print errors for invalid command formats (when applicable)
- Add code to solve the problem (add/commit as needed)

## 🖼 Part 1:

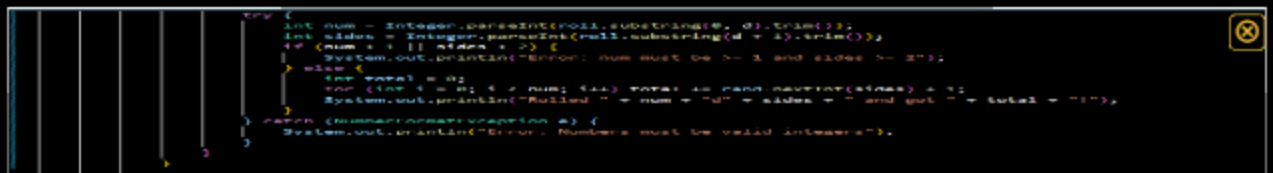
Progress: 100%

**Details:**

Two screenshots are expected

1. Snippet of relevant code showing solution (with ucid/date comment)
2. Full output of executing the program (Capture 3 variations of each command except "/quit")

Code 1



```
// check if echo
/// process echo
else if (input.equalsIgnoreCase("/echo")) {
    System.out.println("Error: Use /echo <message>");
} else if (input.toLowerCase().startsWith("/echo ")) {
    String msg = input.substring(6).trim();
    if (msg.isEmpty()) System.out.println("Error: Use /echo <message>");
    else System.out.println(msg);
}

// check if quit
/// process quit
else if (input.equalsIgnoreCase("/quit")) {
    System.out.println("Goodbye!");
    break;
```

Code 2

```
laura@Laura-Laptop MINGW64 ~/Islu-IT114-003 (M3-Homework)
$ java M3SlashCommandHandler
Running Problem 2 for [N/A] [2025-10-15T12:56:57.617076100]
 Objective: Implement a simple slash command parser.
Enter command: /greet Laura
Hello, Laura!
Enter command: /greet
Error: Use /greet <name>
Enter command: /greet Bob
Hello, Bob!
Enter command: /roll
Error: Use /roll <number>d<sides>
Enter command: /roll 4d6
Rolled 4d6 and got 14!
Enter command: /roll 4.5d4
Error: Numbers must be valid integers
Enter command: /echo
Error: Use /echo <message>
Enter command: /echo Hello
Hello
Enter command: /echo How are you?
How are you?
Enter command: /quit
Goodbye!
Completed Problem 2 for [N/A] [2025-10-15T12:57:11.335833500]
```

Output

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## 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/laurasofia544/Isl8-IT114-003/M3-Homework/M3/SlashCommandHandler.java

URL
https://github.com/laurasofia544/

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## 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:

The code solves the challenge by letting the user type commands that start with a slash and then handling each one separately. It checks what command the user entered, makes sure it's written correctly, and gives clear feedback if something is missing or invalid. This solves the problem by processing the input so that the program can respond properly to different actions like greeting, rolling dice, echoing text, or quitting.

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# Section #3: ( 3 pts.) Challenge 3 - Mad Libs Generator

Progress: 100%

## ☰ Task #1 ( 3 pts.) - Edit the `main` method to solve the challenges

Progress: 100%

**Details:**

- Don't adjust the give code unless noted
- Ensure you have the `stories` folder with the 5 stories
- Challenge 1: Load a **random** story from the "stories" folder
- Challenge 2: Extract **each line** into a collection (i.e., ArrayList)
- Challenge 3: Prompts user for each placeholder (i.e., `<adjective>`)
  - Any word the user types is acceptable, no need to verify if it matches the placeholder type
  - Any placeholder with underscores should display with spaces instead
- Challenge 4: Replace placeholders with user input (assign back to original slot in collection)
- Add code to solve the problem (add/commit as needed)

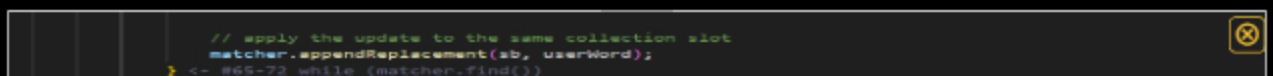
### Part 1:

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 (Capture the process for at least 2 stories)

Code 1



```java
            matcher.appendTail(sb);
            lines.set(i, sb.toString());
        } <- #58-75 for (int i = 0; i < lines.size(); i++)

        // End edits
        System.out.println("\nYour Completed Mad Libs Story:\n");
        StringBuilder finalStory = new StringBuilder();
        for (String line : lines) {
            finalStory.append(line).append("\n");
        }
        System.out.println(finalStory.toString());

        printFooter(ucid, 3);
        scanner.close();
    } <- #26-87 public static void main(String[] args)
} <- #22-88 public class MadLibsGenerator extends BaseClass
```

Code 2

```
laura@Laura-Laptop MINGW64 ~/1x18-IT114-003 (M3-Homework)
$ java M3.MadLibsGenerator
Running Problem 3 for [1x18] [2025-10-13T19:56:46.046559600]
 Objective: Implement a Mad Libs generator that replaces placeholders dynamically.
Enter adjective: pretty
Enter adjective: scary
Enter object: mirror
Enter adjective: smart
Enter verb ending in ing: running
Enter adjective: slow

Your Completed Mad Libs Story:

A pretty witch gave me a potion that would make me scary.
She told me to drink it while standing on a mirror under the smart moon.
As soon as I drank it, I started running uncontrollably.
From that day forward, I became the most slow person in town.

Completed Problem 3 for [1x18] [2025-10-13T19:57:34.903726900]
```

Output

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## 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/laurasofia544/Isl8-IT114-003/M3-Homework/M3/MadLibsGenerator.java

URL
https://github.com/laurasofia544/

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## 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:

The code solves the challenge by using a simple way to pick a random story, read it, and let the user fill in the blanks. It looks for each placeholder inside the story and replaces it with whatever the user types.

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# Section #4: ( 1 pt.) Misc

Progress: 100%

## Task #1 ( 0.33 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


Git commits

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### Part 2:

Progress: 100%

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

URL #1
https://github.com/laurasofia544/lsl8-IT114-003/

URL
https://github.com/laurasofia544/

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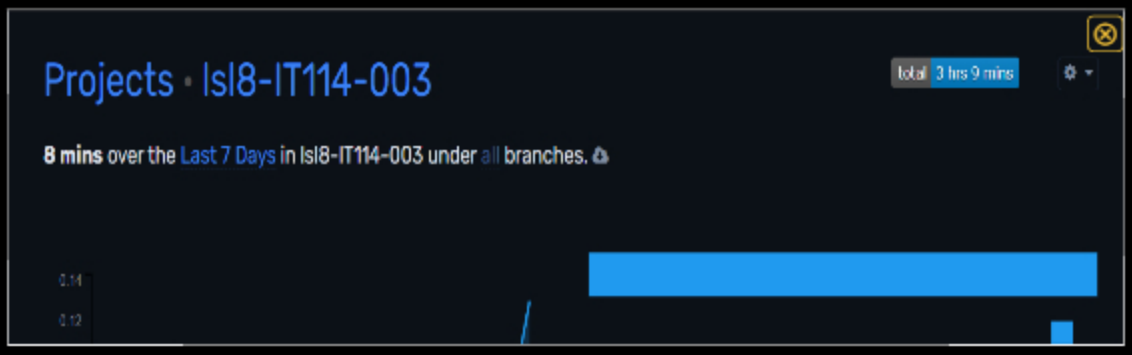
## Task #2 ( 0.33 pts.) - WakaTime - Activity

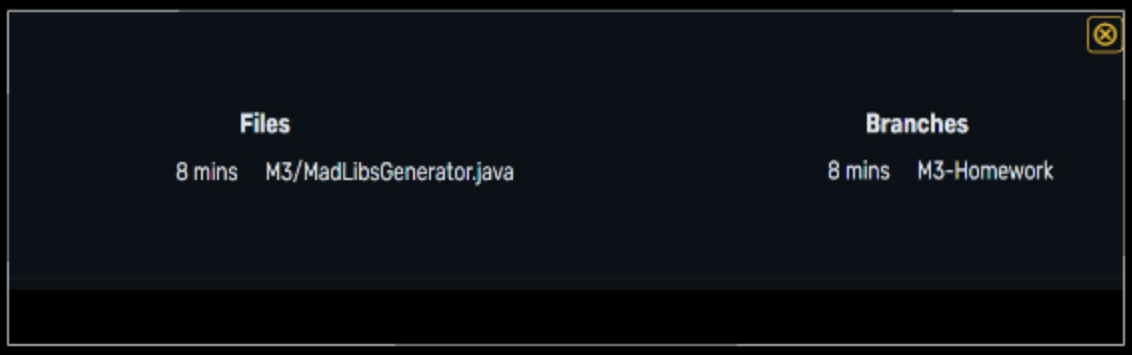
Progress: 100%

**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




I accidentally had my default profile open on VS code and I don't have wakatime installed on there.




That's why it says 8 minutes and only one file. I realized when I was almost done.

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## Task #3 ( 0.33 pts.) - Reflection

Progress: 100%

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

Progress: 100%

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

Your Response:

Through all the problems, I learned how to handle user input in different ways, from command-line arguments, to slash commands, to reading from files. I got better at using conditionals, loops, and basic error checking to make my programs

work more smoothly. I also learned how to organize code with methods and follow a structure using classes.

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## 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 importing the baseline files from github to vs code. As well as reading through the code to understand what was missing and what I needed to complete

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## 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 honestly the second problem with the roll dice and the last problem with the madlibs. It took me a while to figure out how to exactly start and what it was that I needed to do. Thankfully the comments helped me figure it out a little bit.

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