

Intro to JS

DEADLINE: 24.03.2021

FOLDER STRUCTURE

```
FL1_HW7/*
├─ task/
│   └─ FL1_HW7.docx
├─ homework/*
│   └─ js/*
│       ├── task1.js*
│       ├── task2.js*
│       ├── task1.html*
│       ├── task2.html*
│       └─ .eslintrc.js*
```

* – required
● – not needed

TASK

Task 1. You need to calculate amount of defective batteries on battery factory.

Workflow:

1. User inputs amount of batteries. (Use “prompt” function).
2. User inputs percentage of defective batteries. (Use “prompt” function)
3. You need to validate the input data: both values should be numbers, amount of batteries can’t be a negative number, percentage can’t be negative and bigger than 100.
4. If input data isn’t valid, you should show message “Invalid input data”. (Use “alert” function).
5. You need to calculate amount of defective batteries and amount of working batteries.
6. Show message: (example). Use “alert” function

Amount of batteries: 150

Defective rate: 10%

Amount of defective batteries: 15

Amount of working batteries: 135

You should show only 2 numbers after comma (if needed).

Task 2. Find middle character of the word.

User is going to input a word. Your task is to find the middle character of this word. If the word's length is odd - return the middle character. If word's length is even - return the middle 2 characters.

If 2 middle characters are the same, you should show message "Middle characters are the same" (for case where word's length is even).

You should validate for empty value and for value with spaces only, in that case show message: "Invalid value".

For user input use "prompt" function. For displaying result use "alert" function.

Examples:

For user input "test" should return "es"

For user input "commit" should return "Middle characters are the same"

For user input "character" should return "a"

For user input "B" should return "B"

For user input "" should return "Invalid value"

For user input " " should return "Invalid value"

BEFORE SUBMIT

- Read requirements and compare to your homework result
- Format the code (remove unnecessary lines of code)
- Remove all unnecessary files that you might have included by mistake
- In order to use npm package manager you should install **nodejs** (<https://nodejs.org/>)
- Install **eslint** to check your code (*npm install -g eslint*)
- Open a terminal (or cmd)
- Go to 'homework' folder
- Run **eslint** (i.e. *eslint ./js/task1.js*), code should be without 'errors'
- Please note, that one js file should contain one task

SUBMIT

- The folder should be uploaded to GitLab repository "**FL-1**" into **master** branch

USEFUL LINKS

- <https://developer.mozilla.org/en-US/docs/Web/API/Window/prompt>
- <https://developer.mozilla.org/en-US/docs/Web/API/Window/alert>
- https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Global_Objects/parseInt
- https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Global_Objects/parseFloat
- https://developer.mozilla.org/uk/docs/Web/JavaScript/Reference/Global_Objects/Math

- https://developer.mozilla.org/uk/docs/Web/JavaScript/Reference/Global_Objects/String