

Assignment #1

Due Date: 2023.11.05 (Tuesday) 23:59

1) Complete and publish your first open-source project, *numnest*, by following the contents of the lecture note titled "07_Testing_and_Publishing". [50pt]

- Ensure the project name is a variation of and different from "*kw-num-nest*".
- Establish your own GitHub repository for this project.
- Your source code must be set up for automatic testing via GitHub Actions.
- Your project must be published as a package on npm.
- The "avg" command must function properly.

2) After you have completed step 1), proceed to implement the "prime" and "factorial" functions within lib.js. [30pt]

- "prime": Return 'true' if the input number is a prime; otherwise, return 'false'.
- "factorial": Calculates and returns the factorial of the input number. It is acceptable if your "fact" function can process integer inputs up to 15.
- You are not required to make changes to the codes in main.js.

3) Design your own tests for the functions "prime" and "factorial" within lib.test.js. [10pt]

- Employ the functions "test", "expect", and "toBe" in jest.js, similar to how the "avg" command does.
- Creating one individual test for each function is sufficient.
- Your code must pass the tests of your own.

4) Update and republish your npm package including "prime", "factorial" and the related tests. [10pt]

[Submission]

- Submit a PDF file containing the following details:
 - Your name and student ID
 - The URL of your package's GitHub repository
(e.g., <https://github.com/dh-shin/kw-num-nest>)
 - The URL of your package on npm
(e.g., <https://www.npmjs.com/package/kw-num-nest>)
- Your PDF file name should be your own package name.
(e.g., kw-num-nest.pdf)

[Note]

- Your GitHub repository must always be kept up-to-date, because the evaluation will be based on the code in your repository.
- **Late submissions will not be accepted** and will receive a zero point.
- You can contact me via e-mail (dhshin@kw.ac.kr) if you have any questions about the assignment.