



## Assignment2

1. Write a function that logs the current file path and directory. (0.5 Grade)
  - Output Example: {File: "/home/user/project/index.js", Dir: "/home/user/project"}
2. Write a function that takes a file path and returns its file name. (0.5 Grade)
  - Input Example: /user/files/report.pdf
  - Output Example: "report.pdf "
3. Write a function that builds a path from an object (0.5 Grade)
  - Input Example: { dir: "/folder", name: "app", ext: ".js"}
  - Output Example: "/folder/app.js"
4. Write a function that returns the file extension from a given file path. (0.5 Grade)
  - Input Example: /docs/readme.md"
  - Output Example: ".md"
5. Write a function that parses a given path and returns its name and ext. (0.5 Grade)
  - Input Example: /home/app/main.js
  - Output Example: { Name: "main", Ext: ".js" }
6. Write a function that checks whether a given path is absolute. (0.5 Grade)
  - Input Example: /home/user/file.txt
  - Output Example: true
7. Write a function that joins multiple segments (0.5 Grade)
  - Input: "src", "components", "App.js"
  - Output Example: src/components/App.js
8. Write a function that resolves a relative path to an absolute one. (0.5 Grade)
  - Input Example: ./index.js
  - Output Example: /home/user/project/src/index.js
9. Write a function that joins two paths. (0.5 Grade)
  - Input Example: /folder1, folder2/file.txt
  - Output Example: /folder1/folder2/file.txt
10. Write a function that deletes a file asynchronously. (0.5 Grade)
  - Input Example: /path/to/file.txt
  - Output Example: The file.txt is deleted.
11. Write a function that creates a folder synchronously. (0.5 Grade)
  - Output Example: "Success"
12. Create an event emitter that listens for a "start" event and logs a welcome message. (0.5 Grade)
  - Output Example: Welcome event triggered!
13. Emit a custom "login" event with a username parameter. (0.5 Grade)
  - Input Example: "Ahmed"
  - Output Example: "User logged in: Ahmed"
14. Read a file synchronously and log its contents. (0.5 Grade)
  - Input Example: "./notes.txt"
  - Output Example: the file content => "This is a note."
15. Write asynchronously to a file. (0.5 Grade)
  - Input: path: "./async.txt", content: "Async save"
16. Check if a directory exists. (0.5 Grade)
  - Input Example: "./notes.txt"
  - Output Example: true
17. Write a function that returns the OS platform and CPU architecture. (0.5 Grade)
  - Output Example: {Platform: "win32", Arch: "x64"}



## **Assignment2**

18. Use a readable stream to read a file in chunks and log each chunk. (0.5 Grade)
  - Input Example: `"/big.txt"`
  - Output Example: log each chunk
19. Use readable and writable streams to copy content from one file to another. (0.5 Grade)
  - Input Example: `"/source.txt", "/dest.txt"`
  - Output Example: File copied using streams
20. Create a pipeline that reads a file, compresses it, and writes it to another file. (0.5 Grade)
  - Input Example: `"/data.txt", "/data.txt.gz"`

### **C. Bonus (3 Grades):**

#### **How to deliver the bonus?**

- 1- Solve the problem [kth-missing-positive-number](#) on LeetCode
- 2- Inside your assignment folder, create a SEPARATE FILE and name it "bonus.js"
- 3- Copy the code that you have submitted on the website inside "bonus.js" file