

1. File Handling and Modules

In Node.js, modules are a way to organize code into reusable files. They help in breaking down the code into smaller, manageable pieces. For your task, you can use the built-in `'fs'` (File System) module to read and write files.

Here's a simple Node.js program that reads a text file, modifies its content, and writes the updated content to a new file:

```
````javascript
// Importing the 'fs' module
const fs = require('fs');

// Function to read and modify file content
function modifyFileContent(inputFilePath, outputFilePath) {
 // Reading the content of the input file
 fs.readFile(inputFilePath, 'utf8', (err, data) => {
 if (err) {
 console.error('Error reading file:', err);
 return;
 }

 // Modifying the content (for example, converting to uppercase)
 const modifiedContent = data.toUpperCase();

 // Writing the modified content to the output file
 fs.writeFile(outputFilePath, modifiedContent, 'utf8', (err) => {
 if (err) {
 console.error('Error writing file:', err);
 return;
 }

 console.log('File has been modified and saved successfully!');
 });
 });
}

// Example usage
const inputFilePath = 'input.txt';
const outputFilePath = 'output.txt';

modifyFileContent(inputFilePath, outputFilePath);
````
```

In this example, the `fs` module is used to read the content of the input file (`input.txt`), modify it (converting to uppercase), and then write the modified content to the output file (`output.txt`).

Modules are essential here for keeping the code organized and modular. The `fs` module provides a set of functions to interact with the file system, encapsulating file-related operations and making the code more readable. Additionally, modularizing code facilitates code reuse and maintenance, making it easier to understand and update in the future.