

Q.1) Illustrate the need for JSHint package

Answer:

JSHint is a static code analysis tool used in web development to detect errors and potential problems in JavaScript code. It helps developers write more reliable, error-free, and maintainable code.

Need for JSHint:

1. **Code Quality:** JSHint ensures that the JavaScript code follows best practices and coding standards.
2. **Error Detection:** It highlights syntax errors, undeclared variables, and dangerous coding patterns early.
3. **Debugging Help:** It simplifies debugging by identifying common issues before code execution.
4. **Customizable Rules:** Developers can set their own coding standards and enforce them across the project.
5. **Team Collaboration:** It ensures consistency in code style when multiple developers are working together.

Example:

Without JSHint, a missing semicolon or undeclared variable may cause runtime errors. JSHint catches these during development.

Q.2) Implement small application which will make use of mentioned package (I/p, O/p)

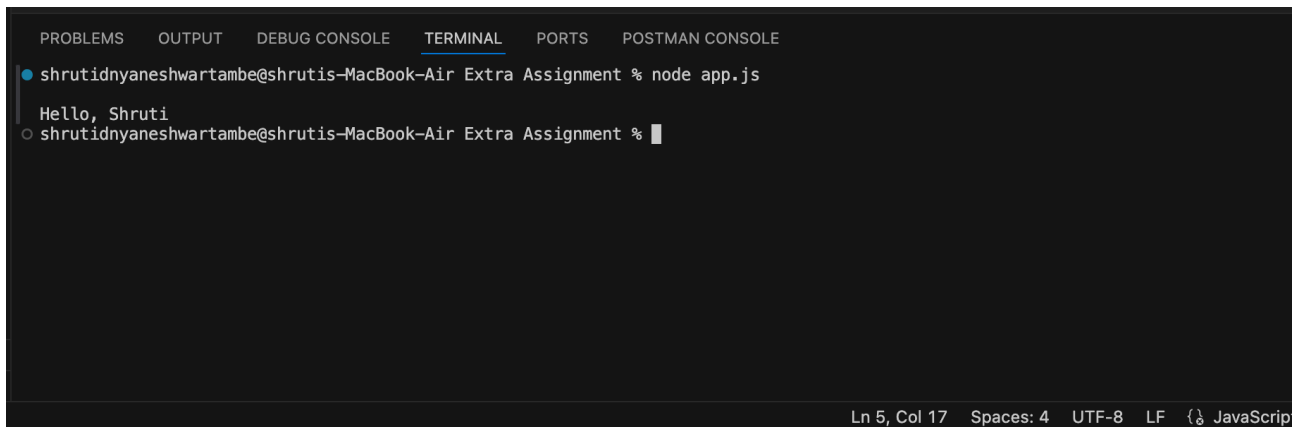
Answer:

Code:

```
function greet(name) {  
    console.log("Hello, " + name);  
}
```

```
greet("Shruti");
```

Output:

A screenshot of a terminal window with a dark background. At the top, there are tabs for 'PROBLEMS', 'OUTPUT', 'DEBUG CONSOLE', 'TERMINAL' (which is active), 'PORTS', and 'POSTMAN CONSOLE'. The terminal shows a command prompt where the user has entered 'node app.js'. The output of the command is 'Hello, Shruti'. Below the output, the prompt is shown again. At the bottom right of the terminal, there is a status bar that reads 'Ln 5, Col 17 Spaces: 4 UTF-8 LF { } JavaScript'.

Q.3) Illustrate the need for code of ethics

Answer:

Need for Code of Ethics in Web Development:

A code of ethics provides moral guidelines for professional behavior in web development.

Reasons:

1. **User Privacy:** Developers must protect user data and avoid unauthorized access.
2. **Security:** Writing secure code to prevent hacking and data leaks is an ethical responsibility.
3. **Transparency:** Developers should not hide malicious functionality or deceptive practices.
4. **Respect for Intellectual Property:** Avoid plagiarism and give credit for borrowed code.
5. **Inclusivity:** Create applications that are accessible to all, including people with disabilities.

Conclusion:

Following a code of ethics builds user trust, enhances professional reputation, and ensures responsible use of technology.