Illustrate the need Marked Package

The **marked** package is a fast and powerful Markdown parser built for Node.js. It converts Markdown syntax into HTML. Here's a clear illustration of its **need and use**:

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1. What is marked?

- It's a low-level Markdown compiler used to parse and compile Markdown content to HTML.

- It allows developers to **render Markdown** files on web pages or process Markdown input in apps.

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2. Why is marked needed?

a. Markdown is widely used

- Markdown is a simple, readable format used in:
  - Documentation (e.g., README.md files)
  - Blogs and content management systems
  - Forums and online editors

b. Browsers can't read Markdown directly

- Browsers understand HTML, not Markdown.

- You need a way to **convert Markdown to HTML**, which is what marked does.

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3. Key Features of marked

- **Fast:** Uses a Lexer and Parser for speed.

- **Pluggable:** You can modify rendering behavior using custom renderers.

- **Secure:** Offers options to sanitize output and prevent XSS.

- **Lightweight:** Small footprint and easy to integrate.

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

```javascript
// app.js

const fs = require('fs');

const marked = require('marked');


// Read markdown input from a file

const inputFile = 'input.md';

const outputFile = 'output.html';


fs.readFile(inputFile, 'utf8', (err, markdown) => {

  if (err) {

    console.error('Error reading markdown file:', err);

    return;

  }


  // Convert Markdown to HTML

  const html = marked(markdown);


  // Save HTML to output file

  fs.writeFile(outputFile, html, (err) => {

    if (err) {

      console.error('Error writing HTML file:', err);

    } else {

      console.log(`HTML saved to ${outputFile}`);

    }

  });

});
```

Create input.md

Welcome

This is a sample **Markdown** file converted to *HTML* using `marked`.

- Fast

- Lightweight

- Easy to use

Output

```
<h1>Welcome</h1>

<p>This is a sample <strong>Markdown</strong> file converted to <em>HTML</em> using <code>marked</code>.</p>

<ul>

<li>Fast</li>

<li>Lightweight</li>

<li>Easy to use</li>

</ul>
```

Illustrate the need for code of ethics

1. Promotes Trust

- Builds **public confidence** in professionals and organizations.

- Ensures users or clients that the service is being done **ethically and responsibly**.

2. Guides Decision Making

- Offers a clear **framework for ethical behavior**.

- Helps in dealing with **gray areas** or morally ambiguous situations.

3. Prevents Misconduct

- Defines what is **unacceptable behavior** (e.g., fraud, plagiarism, misuse of data).

- Acts as a **deterrent** for unethical practices.

4. Encourages Accountability

- Holds professionals **responsible** for their actions.

- Enables **transparent handling** of violations or unethical conduct.

5. Ensures Fairness and Respect

- Promotes **equality, respect, and dignity** in workplaces and client relationships.

- Prevents discrimination, harassment, or exploitation.