

Problem-1 Output



Problem-2 Output



Problem-3 Output

```
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
```

```
node - Problem3 + v [icon] [icon] ... [icon] X
```

```
PS C:\Users\Aditya Pathak R\Desktop\MSC(ICT)\SEM-3\WOS\49_AADITYA_701_A1\Problem3> nodemon app
```

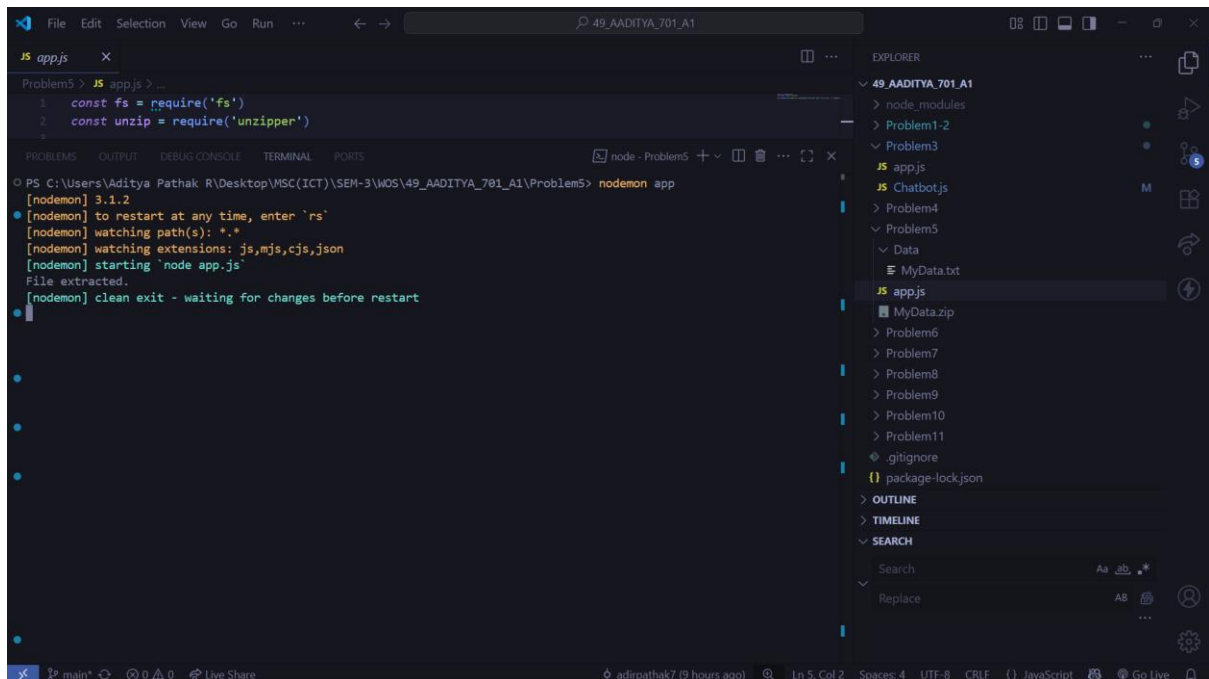
```
[nodemon] 3.1.2
[nodemon] to restart at any time, enter `rs`
[nodemon] watching path(s): *.*
[nodemon] watching extensions: js,mjs,cjs,json
[nodemon] starting `node app.js`
```

```
BackendBot - Ask me anything about backend technologies!
(Type 'bye' to exit)
You: hii
hii
Bot: Hello, you can ask me about backend tech!
You: do you know about nodejs
do you know about nodejs
Bot: Node.js is a JavaScript runtime built on Chrome's V8 engine. It's used to build scalable network applications.
You: bye
bye
Bot: Goodbye! Keep learning backend tech.
```

Problem-4 Output

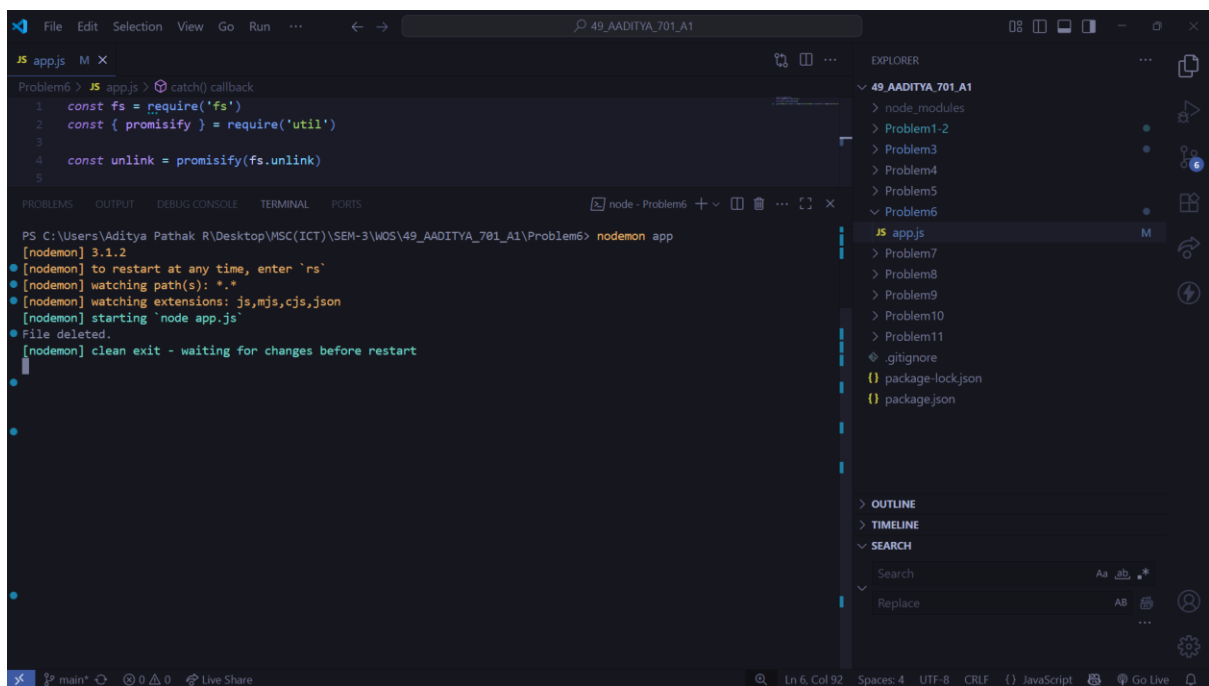
The screenshot shows the Visual Studio Code interface. The top menu bar includes File, Edit, Selection, View, Go, Run, and a search icon. The title bar shows the file path: 49_AADITYA_701_A1. The main editor area displays a file named 'MyData.zip' with a message: 'Problem4 > MyData.zip uses an unsupported text encoding.' Below this, a terminal window is open, showing the command 'node - Problem4' and the output of a Node.js application. The output includes: 'PS C:\Users\Aditya Pathak R\Desktop\MSCT\SEM-3\WOS\49_AADITYA_701_A1\Problem4> node app', '[nodemon] 3.1.2', '[nodemon] to restart at any time, enter `rs`', '[nodemon] watching path(s): *.*', '[nodemon] watching extensions: js,mjs,cjs,json', '[nodemon] starting `node app.js`', 'Zip complete! Total bytes: 1899 bytes', and '[nodemon] clean exit - waiting for changes before restart'. The Explorer panel on the right shows the project structure, including a '49_AADITYA_701_A1' folder, a 'node_modules' folder, and a 'MyData.zip' file. The bottom status bar shows the file is encoded in UTF-8, has 1.07KB, and is using the 'Go Live' extension.

Problem-5 Output



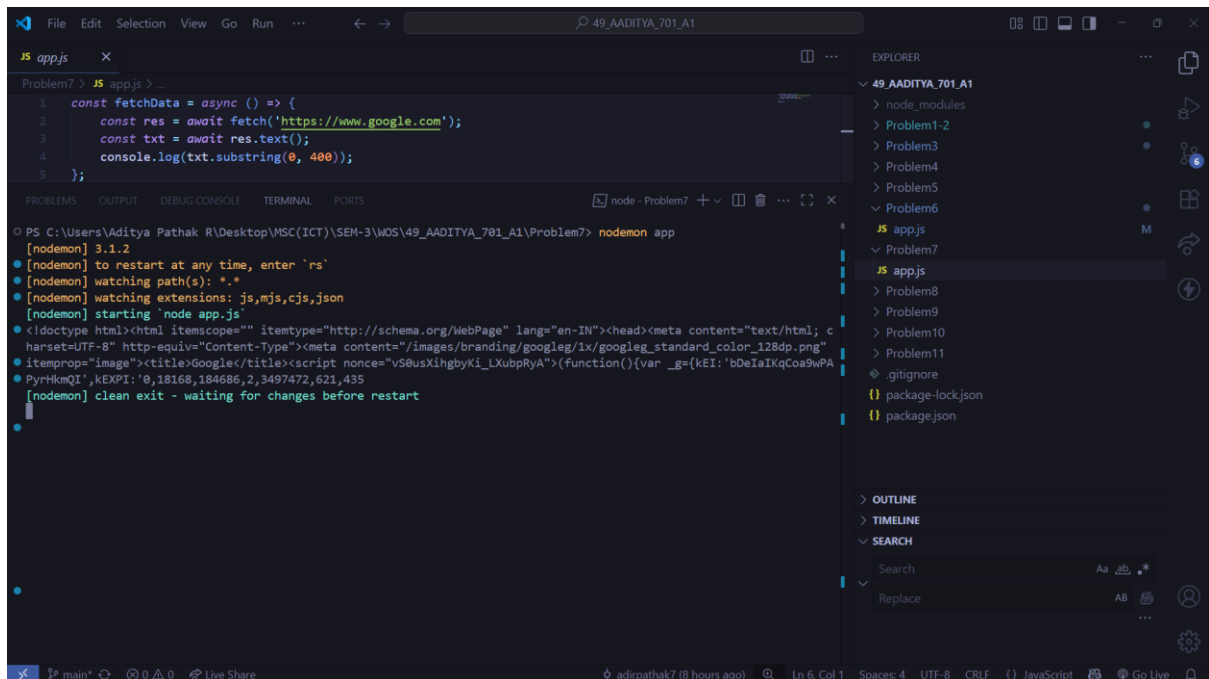
```
File Edit Selection View Go Run ... 49_AADITYA_701_A1
JS app.js x
Problem5 > JS app.js > ...
1 const fs = require('fs')
2 const unzip = require('unzipper')
...
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS node - Problem5 + v ... x
PS C:\Users\Aditya Pathak R\Desktop\MSC(ICT)\SEM-3\WQS\49_AADITYA_701_A1\Problem5> nodemon app
[nodemon] 3.1.2
[nodemon] to restart at any time, enter `rs`
[nodemon] watching path(s): *.*
[nodemon] watching extensions: js,mjs,cjs,json
[nodemon] starting `node app.js`
File extracted.
[nodemon] clean exit - waiting for changes before restart
...
main* 0 0 0 Live Share
adipathak7 (9 hours ago) Ln 5, Col 2 Spaces: 4 UTF-8 CRLF () JavaScript Go Live
```

Problem-6 Output



```
File Edit Selection View Go Run ... 49_AADITYA_701_A1
JS app.js M x
Problem6 > JS app.js > catch() callback
1 const fs = require('fs')
2 const { promisify } = require('util')
3
4 const unlink = promisify(fs.unlink)
5
...
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS node - Problem6 + v ... x
PS C:\Users\Aditya Pathak R\Desktop\MSC(ICT)\SEM-3\WQS\49_AADITYA_701_A1\Problem6> nodemon app
[nodemon] 3.1.2
[nodemon] to restart at any time, enter `rs`
[nodemon] watching path(s): *.*
[nodemon] watching extensions: js,mjs,cjs,json
[nodemon] starting `node app.js`
File deleted.
[nodemon] clean exit - waiting for changes before restart
...
main* 0 0 0 Live Share
Ln 6, Col 92 Spaces: 4 UTF-8 CRLF () JavaScript Go Live
```

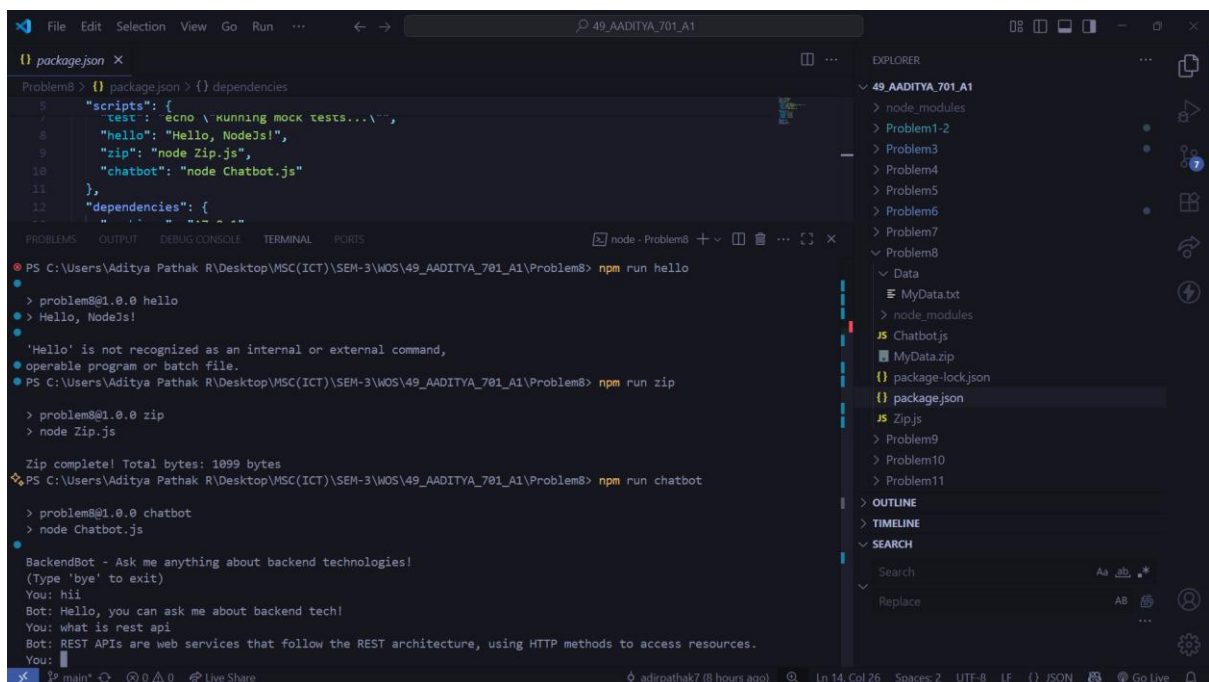
Problem-7 Output



```
1 const fetchData = async () => {
2   const res = await fetch('https://www.google.com');
3   const txt = await res.text();
4   console.log(txt.substring(0, 400));
5 };

PS C:\Users\Aditya Pathak R\Desktop\MSC(ICT)\SEM-3\WOS\49_AADITYA_701_A1\Problem7> nodemon app
[nodemon] 3.1.2
[nodemon] to restart at any time, enter `rs`
[nodemon] watching path(s): *.*
[nodemon] watching extensions: js,mjs,cjs,json
[nodemon] starting `node app.js`
<!doctype html><html itemscope="" itemtype="http://schema.org/WebPage" lang="en-IN"><head><meta content="text/html; charset=UTF-8" http-equiv="Content-Type"><meta content="/images/branding/google/1x/googleleg_standard_color_128dp.png" itemprop="image"><title>Google</title><script nonce="vS0usXingbyKi_LXubpRyA">(function(){var _g={kEI:'bDeIaIKqCoa9wPA
PyrHkMQI',kEXPI:'0,18168,184686,2,3497472,621,435
[nodemon] clean exit - waiting for changes before restart
```

Problem-8 Output



```
5 "scripts": {
6   "test": "echo `kunning mock tests...`",
7   "hello": "Hello, NodeJs!",
8   "zip": "node Zip.js",
9   "chatbot": "node Chatbot.js"
10 },
11 "dependencies": {
12   // ...
13 }
14 }

PS C:\Users\Aditya Pathak R\Desktop\MSC(ICT)\SEM-3\WOS\49_AADITYA_701_A1\Problem8> npm run hello
> problem@1.0.0 hello
> Hello, NodeJs!

PS C:\Users\Aditya Pathak R\Desktop\MSC(ICT)\SEM-3\WOS\49_AADITYA_701_A1\Problem8> npm run zip
> problem@1.0.0 zip
> node Zip.js

Zip complete! Total bytes: 1099 bytes
PS C:\Users\Aditya Pathak R\Desktop\MSC(ICT)\SEM-3\WOS\49_AADITYA_701_A1\Problem8> npm run chatbot
> problem@1.0.0 chatbot
> node Chatbot.js

BackendBot - Ask me anything about backend technologies!
(Type 'bye' to exit)
You: hii
Bot: Hello, you can ask me about backend tech!
You: what is rest api
Bot: REST APIs are web services that follow the REST architecture, using HTTP methods to access resources.
You:
```

Problem-9 Output

The screenshot shows a VS Code editor with a file named `app.js` open. The code in the editor is as follows:

```
30 if (fs.existsSync(newFilePath)) {
31   console.log('Renamed file exists.');
```

```
32 }
33
34 // 6. Delete the File
35 fs.unlinkSync(newFilePath);
36 console.log('File deleted.');
```

The output window shows the following logs:

```
PS C:\Users\Aditya Pathak R\Desktop\MSC(ICT)\SEM-3\WOS\49_AADITYA_701_A1\Problem9> nodemon app
[nodemon] 3.1.2
[nodemon] to restart at any time, enter `rs`
[nodemon] watching path(s): *.*
[nodemon] watching extensions: js,mjs,cjs,json
[nodemon] starting `node app.js`
File written successfully.
File content: Hello, Nodejs.
MERN Stack.
File renamed.
Renamed file exists.
File deleted.
[nodemon] clean exit - waiting for changes before restart
```

The Explorer panel on the right shows the project structure for `49_AADITYA_701_A1`, including `node_modules`, `Problem1-2`, `Problem3`, `Problem4`, `Problem5`, `Problem6`, `Problem7`, `Problem8`, `Problem9`, `MyFiles`, `app.js`, `Problem10`, `Problem11`, `.gitignore`, `package-lock.json`, and `package.json`.

Problem-10 Output

The screenshot shows a VS Code editor with a file named `app.js` open. The code in the editor is as follows:

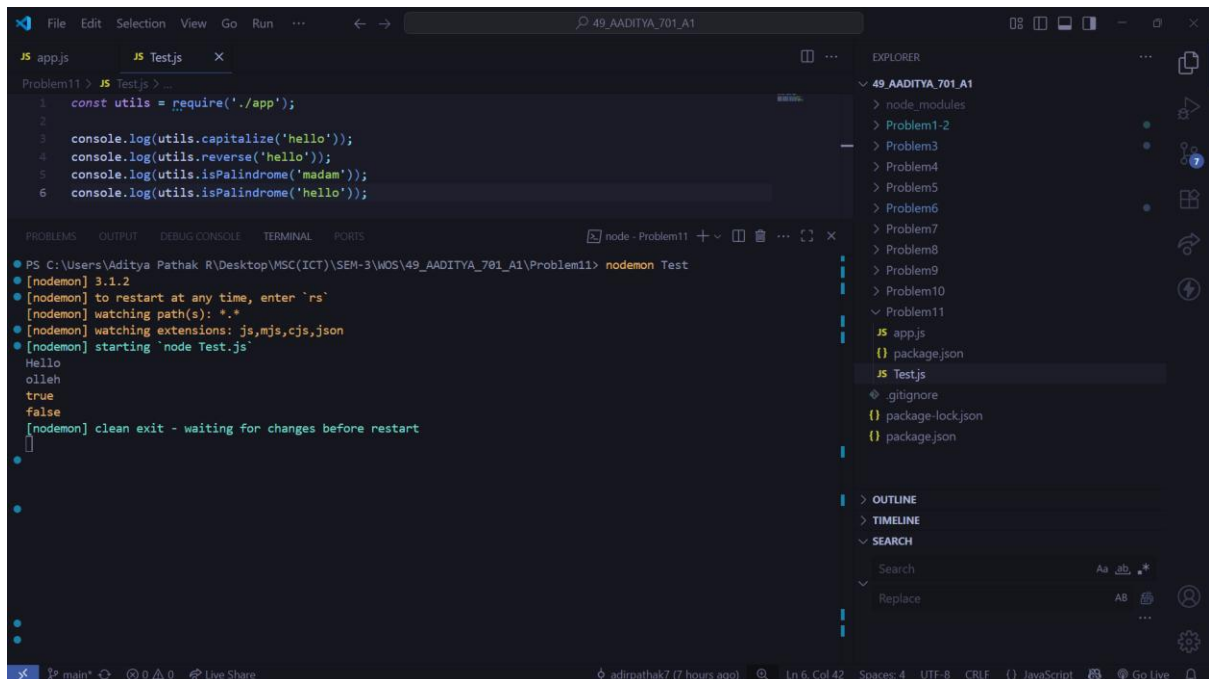
```
14
15 console.log("Process platform:", process.platform);
16 console.log("Current working dir:", process.cwd());
17 console.log("Memory usage:", process.memoryUsage());
18
19 const buffer = Buffer.from("Hello Node.js!");
20 console.log("Buffer data:", buffer.toString());
```

The output window shows the following logs:

```
PS C:\Users\Aditya Pathak R\Desktop\MSC(ICT)\SEM-3\WOS\49_AADITYA_701_A1\Problem10> nodemon app
[nodemon] 3.1.2
[nodemon] to restart at any time, enter `rs`
[nodemon] watching path(s): *.*
[nodemon] watching extensions: js,mjs,cjs,json
[nodemon] starting `node app.js`
__dirname: C:\Users\Aditya Pathak R\Desktop\MSC(ICT)\SEM-3\WOS\49_AADITYA_701_A1\Problem10
__filename: C:\Users\Aditya Pathak R\Desktop\MSC(ICT)\SEM-3\WOS\49_AADITYA_701_A1\Problem10\app.js
Process platform: win32
Current working dir: C:\Users\Aditya Pathak R\Desktop\MSC(ICT)\SEM-3\WOS\49_AADITYA_701_A1\Problem10
Memory usage: {
  rss: 36458496,
  heapTotal: 5820416,
  heapUsed: 4701144,
  external: 1663213,
  arrayBuffers: 18691
}
Buffer data: Hello Node.js!
global.customVar: I am a global variable!
setInterval count: 1
This message is delayed using setTimeout.
setInterval count: 2
setInterval count: 3
[nodemon] clean exit - waiting for changes before restart
```

The Explorer panel on the right shows the project structure for `49_AADITYA_701_A1`, including `node_modules`, `Problem1-2`, `Problem3`, `Problem4`, `Problem5`, `Problem6`, `Problem7`, `Problem8`, `Problem9`, `Problem10`, `Problem11`, `.gitignore`, `package-lock.json`, and `package.json`.

Problem-11 Output



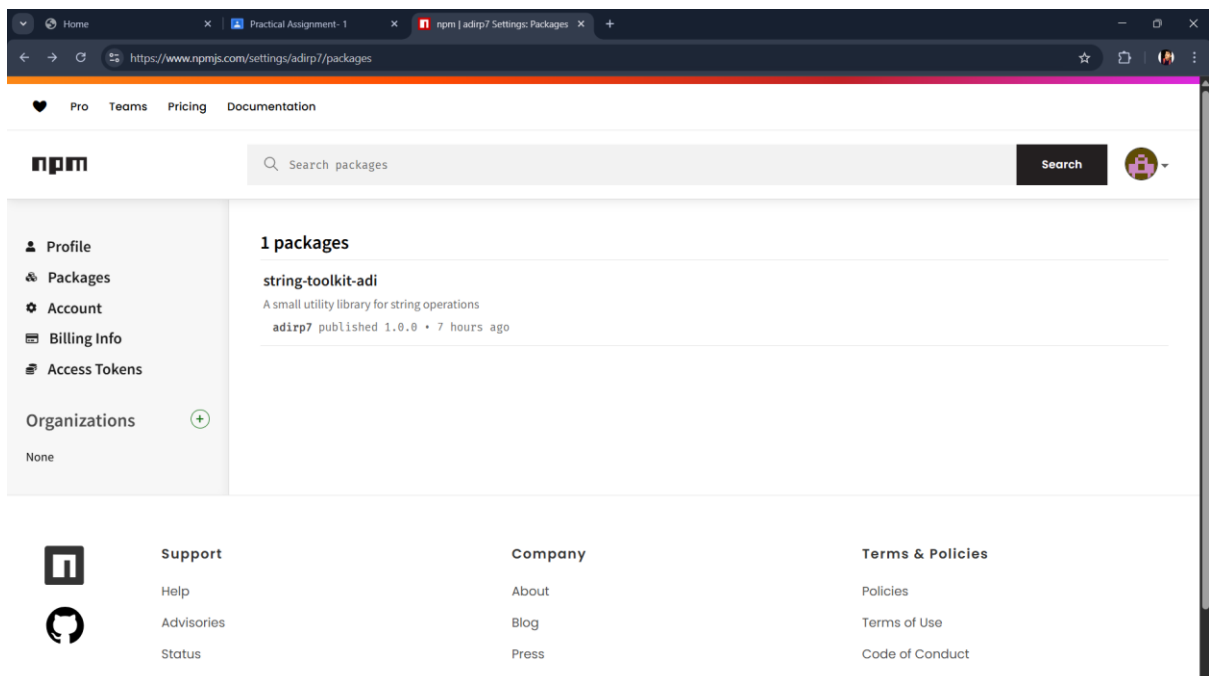
The screenshot shows the Visual Studio Code editor with a file named 'Test.js' open. The code in the file is as follows:

```
1 const utils = require('./app');
2
3 console.log(utils.capitalize('hello'));
4 console.log(utils.reverse('hello'));
5 console.log(utils.isPalindrome('madam'));
6 console.log(utils.isPalindrome('hello'));
```

The terminal output shows the execution of the code using Node.js:

```
PS C:\Users\Aditya Pathak R\Desktop\MSCT\SEM-3\WOS\49_AADITYA_701_A1\Problem11> node Test.js
Hello
olleh
true
false
[nodemon] clean exit - waiting for changes before restart
```

The terminal also shows the output of the 'nodemon' command, indicating that it is watching for changes and restarting the process.



The screenshot shows the npm website with the user's profile and packages. The user's profile is visible on the left, and the packages section shows one package: 'string-toolkit-adi'.

1 packages

string-toolkit-adi
A small utility library for string operations
adrip7 published 1.0.0 • 7 hours ago

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