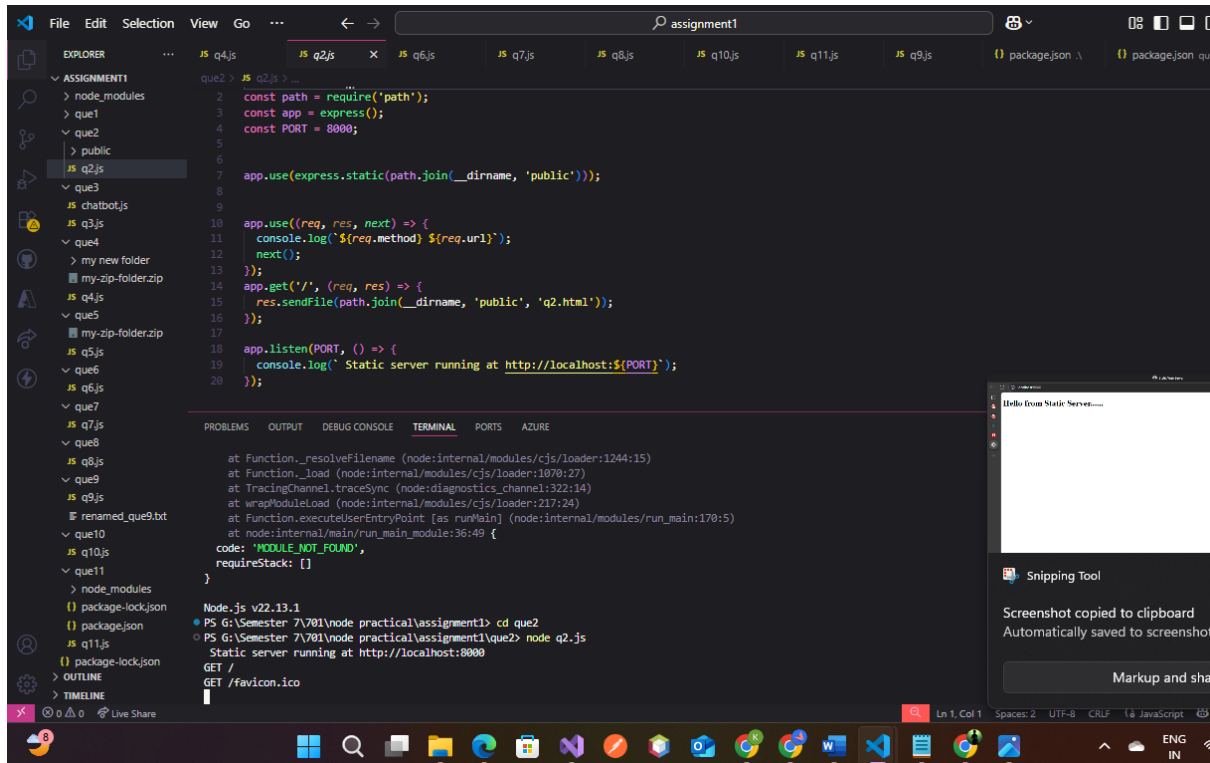


## Q-2



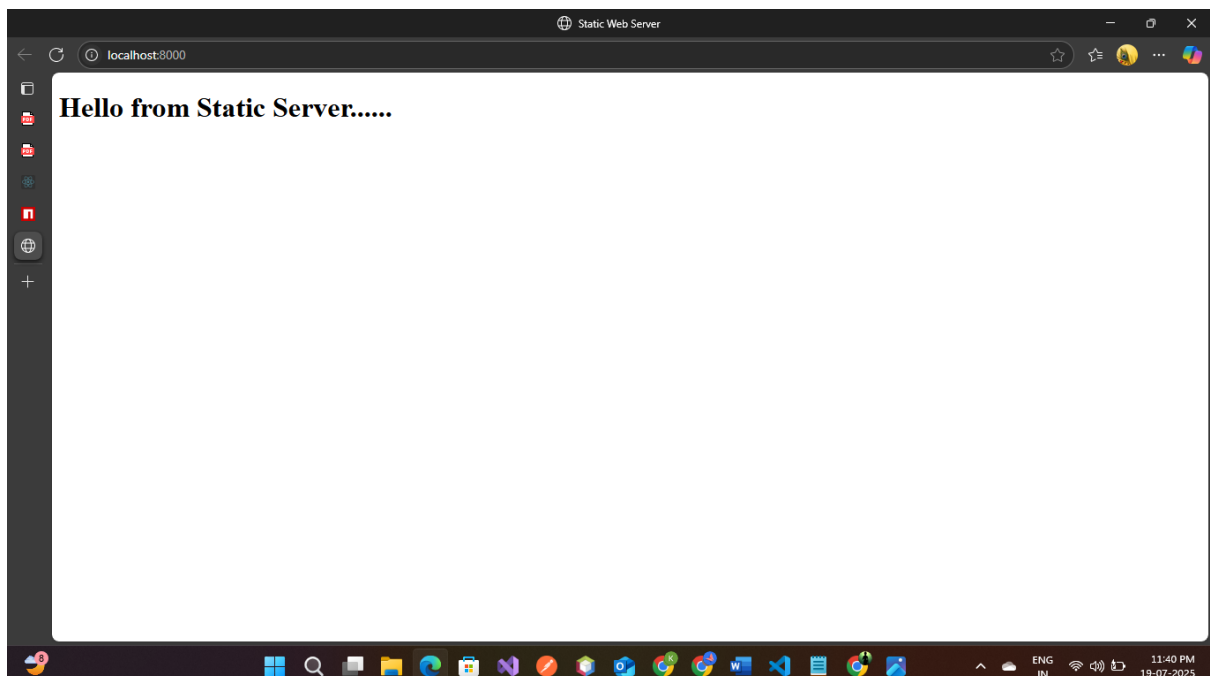
The screenshot shows the Visual Studio Code editor with a file named `q2.js` open. The code in `q2.js` is as follows:

```
1 const path = require('path');
2 const app = express();
3 const PORT = 8000;
4
5
6 app.use(express.static(path.join(__dirname, 'public')));
7
8
9 app.use((req, res, next) => {
10   console.log(`${req.method} ${req.url}`);
11   next();
12 });
13
14 app.get('/', (req, res) => {
15   res.sendFile(path.join(__dirname, 'public', 'q2.html'));
16 });
17
18 app.listen(PORT, () => {
19   console.log(`Static server running at http://localhost:${PORT}`);
20 });
```

The terminal window at the bottom shows the following output:

```
Node.js v22.13.1
PS G:\Semester 7\701\node practical\assignment1> cd que2
PS G:\Semester 7\701\node practical\assignment1\que2> node q2.js
Static server running at http://localhost:8000
GET /
GET /favicon.ico
```

A Snipping Tool window is also visible, showing a screenshot of the text "Hello from Static Server.....".



The screenshot shows a Windows 10 desktop with a VS Code editor window open. The editor displays a file named `que3.js` with the following JavaScript code:

```

1 // app.js
2 const readline = require('readline');
3 const chatbot = require('./chatbot');
4 const rl = readline.createInterface({
5   input: process.stdin,
6   output: process.stdout,
7   prompt: 'You: ',
8 });
9 console.log("Welcome to University Chatbot! (type 'exit' to quit)");
10 rl.prompt();
11
12 rl.on('line', (line) => {
13   const input = line.trim();
14   if (input.toLowerCase() === 'exit') {
15     console.log('Chatbot: Goodbye!');
16     rl.close();
17   } else {
18     const response = chatbot.getResponse(input);
19     console.log('Chatbot:', response);
20     rl.prompt();
21   }
22 });

```

The terminal window shows the output of the script:

```

PS G:\Semester 7\701\node practical\assignment1\que1> cd ..
PS G:\Semester 7\701\node practical\assignment1> cd que3
PS G:\Semester 7\701\node practical\assignment1\que3> node q3.js
Welcome to University Chatbot! (type 'exit' to quit)
You: hi
Chatbot: Hello! How can I help you?
You: name
Chatbot: I am chatbot, your WNSRU university assistant.
You: courses
Chatbot: We offer courses in MSC-IT and MSC-JCT.
You: fees
Chatbot: The tuition fees vary by course. Please check the official website for details.
You: admission
Chatbot: Admissions open from July 1st every year.
You: thank you
Chatbot: Your Most welcome
You:

```

The image shows a VS Code editor window with a file explorer on the left, a code editor in the center, and a terminal at the bottom.

**File Explorer (Left):** Shows a project structure with files like `node_modules`, `package-lock.json`, `package.json`, and `q4.js`. The `q4.js` file is selected.

**Code Editor (Center):** Displays the content of `q4.js`:

```
1 const fs = require('fs');
2 const archiver = require('archiver'); // 324.9k (gzip: 95.2k)
3 const path = require('path');
4 const sourceFolder = 'my new folder';
5 const zipFilePath = 'my-zip-folder.zip';
6
7
8 const output = fs.createWriteStream(zipFilePath);
9 const archive = archiver('zip', {
10   zlib: { level: 9 }
11 });
12
13 output.on('close', () => {
14   console.log(` Zip created: ${zipFilePath} (${archive.pointer()} total bytes)`);
15 });
16
17 Complexity is 3 Everything is cool!
18 archive.on('warning', err => {
19   if (err.code === 'EMBEDDING') {
20     console.warn('Warning:', err);
21   } else {
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100
```

**Terminal (Bottom):** Shows the output of the command `node q4.js`:

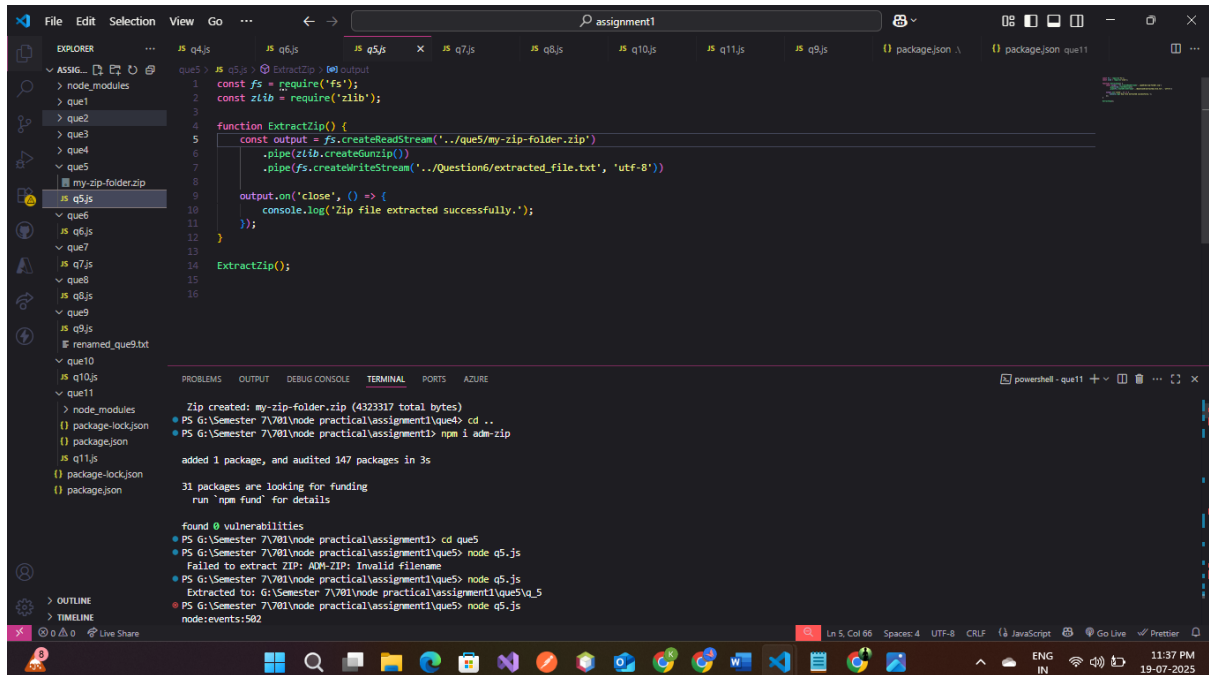
```
PS G:\Semester 7\01\node practical\assignment1> node q4.js
added 78 packages, and audited 146 packages in 28s

31 packages are looking for funding
  run `npm fund` for details

found 0 vulnerabilities
PS G:\Semester 7\01\node practical\assignment1> cd que4
PS G:\Semester 7\01\node practical\assignment1\que4> node q4.js
 Zip created: my-zip-folder.zip (432317 total bytes)
PS G:\Semester 7\01\node practical\assignment1\que4> cd ..
PS G:\Semester 7\01\node practical\assignment1> npm i adm-zip
added 1 package, and audited 147 packages in 3s

31 packages are looking for funding
```

## Q-5



```
1 const fs = require('fs');
2 const zlib = require('zlib');
3
4 function ExtractZip() {
5     const output = fs.createReadStream('../que5/my-zip-folder.zip')
6     .pipe(zlib.createGunzip())
7     .pipe(fs.createWriteStream('../Question6/extracted_file.txt', 'utf-8'));
8
9     output.on('close', () => {
10         console.log('Zip file extracted successfully.');

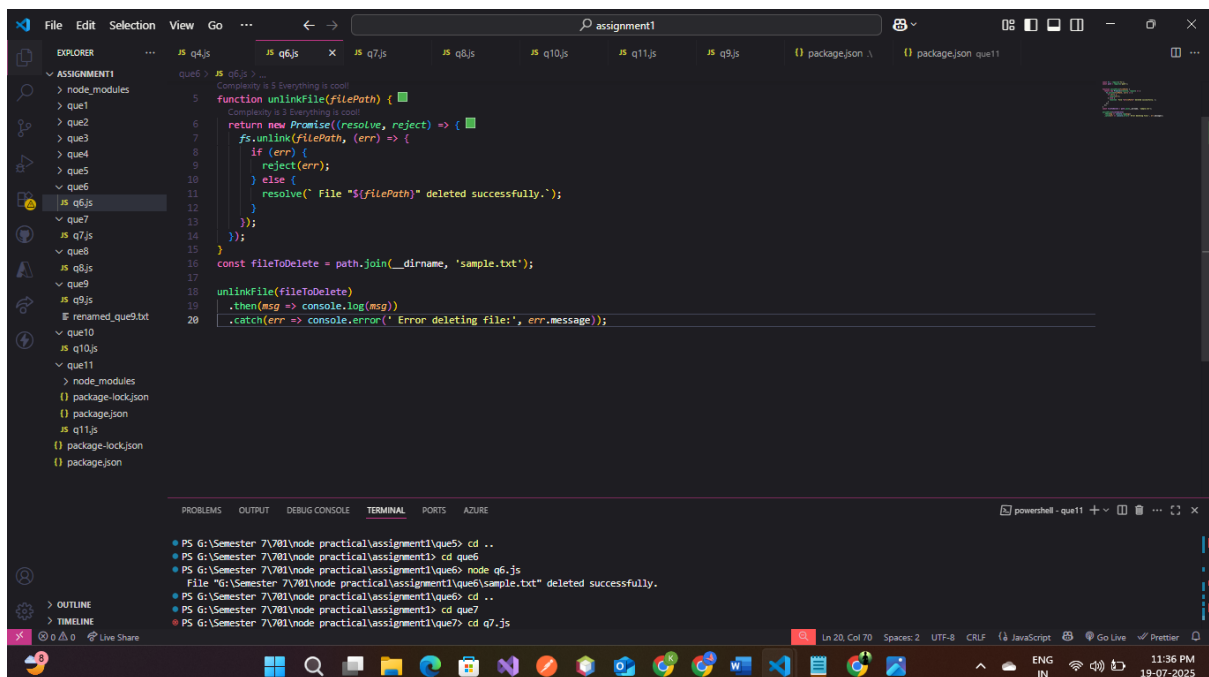
Terminal Output:



```
Zip created: my-zip-folder.zip (4323317 total bytes)
PS G:\Semester 7\701\node practical\assignment1\que4> cd ..
PS G:\Semester 7\701\node practical\assignment1> npm i adm-zip
added 1 package, and audited 147 packages in 3s
31 packages are looking for funding
run 'npm fund' for details
found 0 vulnerabilities
PS G:\Semester 7\701\node practical\assignment1> cd que5
PS G:\Semester 7\701\node practical\assignment1\que5> node q5.js
Failed to extract ZIP: ADM-ZIP: Invalid filename
PS G:\Semester 7\701\node practical\assignment1\que5> node q5.js
Extracted to: G:\Semester 7\701\node practical\assignment1\que5\q_5
PS G:\Semester 7\701\node practical\assignment1\que5> node q5.js
node:events:502
```


```

## Q-6



```
5 function unlinkFile(filePath) {
6     return new Promise((resolve, reject) => {
7         fs.unlink(filePath, (err) => {
8             if (err) {
9                 reject(err);
10            } else {
11                resolve(`File "${filePath}" deleted successfully.`);
12            }
13        });
14    });
15 }
16
17 const fileToDelete = path.join(__dirname, 'sample.txt');
18
19 unlinkFile(fileToDelete)
20 .then(msg => console.log(msg))
21 .catch(err => console.error('Error deleting file:', err.message));
```

Terminal Output:

```
PS G:\Semester 7\701\node practical\assignment1\que5> cd ..
PS G:\Semester 7\701\node practical\assignment1> cd que6
PS G:\Semester 7\701\node practical\assignment1\que6> node q6.js
File "G:\Semester 7\701\node practical\assignment1\que6\sample.txt" deleted successfully.
PS G:\Semester 7\701\node practical\assignment1\que6> cd ..
PS G:\Semester 7\701\node practical\assignment1> cd que7
PS G:\Semester 7\701\node practical\assignment1\que7> cd q7.js
```

The image shows a Windows 10 desktop with a VS Code editor open. The editor has a dark theme and is displaying a file named `q7.js`. The code in `q7.js` is as follows:

```
const fetch = (...args) => fetch(...args).then(res => res.json());

const fetch = (await import('node-fetch')).default; // Calculating...

// Complexity is 3 Everything is cool
// Complexity is 3 Everything is cool
async function fetchGoogleHomepage() {
  try {
    const response = await fetch('https://www.google.com/');
  }
}
```

The Explorer sidebar on the left shows a project structure with folders `node_modules`, `package-lock.json`, and `package.json`. The Output window at the bottom shows the following text:

**npm warn deprecated node-domexception@1.0.0:** Use your platform's native DOMException instead

added 6 packages, and audited 153 packages in 9s

34 packages are looking for funding  
run `npm fund` for details

found 0 vulnerabilities

7/6/2025 7:00:10 PM node practical assignments\c7 q7.js  
7/6/2025 7:00:10 PM node practical assignments\c7 q7.js

node\_modules  
package-lock.json  
package.json  
q1.js  
q2.js  
q3.js  
q4.js  
q5.js  
q6.js  
q7.js  
q8.js  
q9.js  
renamed.q10.js  
q10.js  
q11.js  
package-lock.json  
package.json

OUTLINE  
TIMELINE

Live Share

The Terminal window at the bottom shows the command `npm run fund` and its output, which includes a list of vulnerabilities and a list of packages for funding.

The screenshot shows a VS Code editor window with the following content:

**Explorer:**

- node\_modules
- package-lock.json
- package.json
- package.json

**Main Editor (que8.js):**

```

1  const express = require('express');
2  const app = express();
3  const port = 8000;
4
5  // GET request to "/"
6  app.get('/', (req, res) => {
7    res.send('Hello World!');
8  });
9
10 // Listen on port 8000
11 app.listen(port, () => {
12   console.log(`Server is running on port ${port}`);
13 });

```

**Output Panel:**

```

PS C:\Semester 7\701\node practical\assignment1\que8> node que8.js
Server is running on port 8000

```

**Terminal:**

```

PS C:\Semester 7\701\node practical\assignment1\que8> node que8.js
Server is running on port 8000

```

## Q-9

The screenshot shows a VS Code editor with a file named `q9.js` open. The file contains the following JavaScript code:

```

8  const content = fs.readFileSync('que9.txt', 'utf8');
9  console.log(' File content:', content);
10
11 fs.appendFileSync('que9.txt', '\nThis is additional content.', 'utf8');
12 console.log(' Content appended.');
```

The terminal window shows the following output:

```

PS G:\Semester 7\701\node practical\assignment1\que9> cd ..
PS G:\Semester 7\701\node practical\assignment1> cd que9
PS G:\Semester 7\701\node practical\assignment1\que9> node q9.js
File written successfully.
File content: Hello Krishna
Content appended.
File renamed to renamed_que9.txt
File exists? true
PS G:\Semester 7\701\node practical\assignment1\que9> cd ..
PS G:\Semester 7\701\node practical\assignment1> cd que10
PS G:\Semester 7\701\node practical\assignment1\que10> node q10.js
```

## Q-10

The screenshot shows a VS Code editor with a file named `q10.js` open. The file contains the following JavaScript code:

```

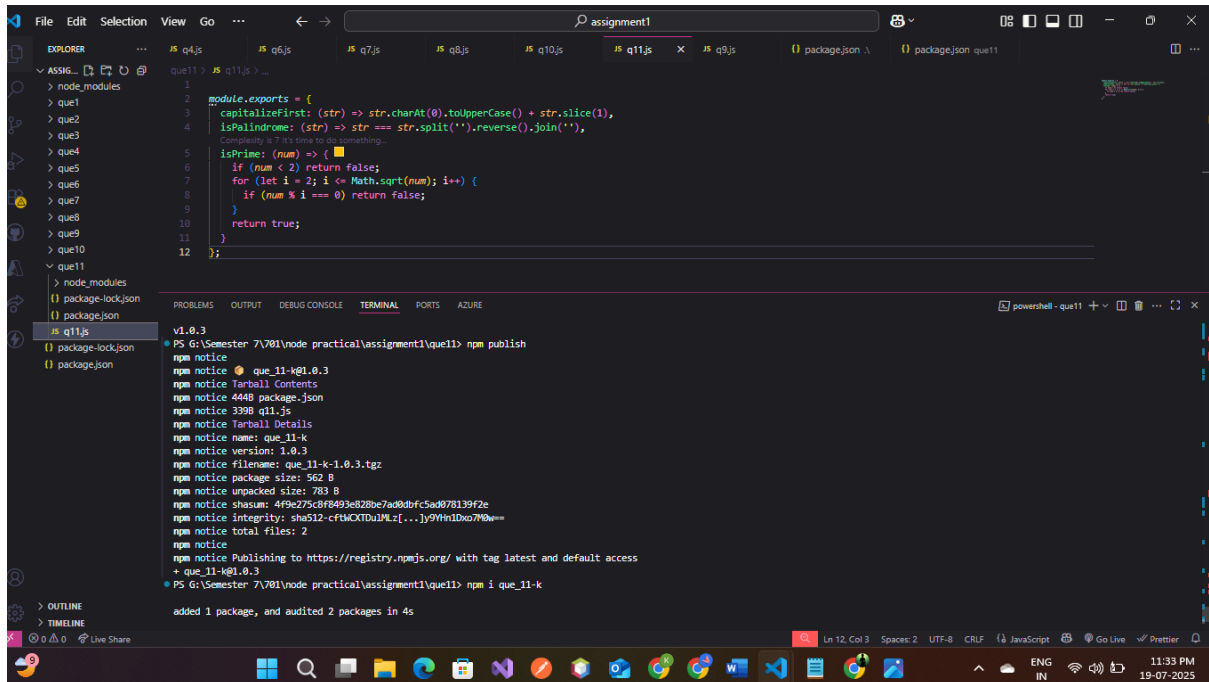
1  console.log(' Current directory:', __dirname);
2  console.log(' Current file:', __filename);
3
4  setTimeout(() => {
5    console.log(' Timeout triggered after 2 seconds');
6  }, 2000);
7
8  let count = 0;
9  const intervalId = setInterval(() => {
10   count++;
11   console.log(' Interval tick $(count)');
12   if (count === 3) {
13     clearInterval(intervalId);
14     console.log(' Interval cleared');
15   }
16 }, 1000);
17
18 console.log('Logging with console.log');
19 console.log(' Process info:');
20 console.log('PID:', process.pid);
21 console.log('Platform:', process.platform);
22 console.log('Node Version:', process.version);
```

The terminal window shows the following output:

```

PS G:\Semester 7\701\node practical\assignment1> cd que10
PS G:\Semester 7\701\node practical\assignment1\que10> node q10.js
Current directory: G:\Semester 7\701\node practical\assignment1\que10
Current file: G:\Semester 7\701\node practical\assignment1\que10\q10.js
Logging with console.log
Process info:
PID: 27592
Platform: win32
Node Version: v22.13.1
Interval tick 1
Timeout triggered after 2 seconds
Interval tick 2
Interval tick 3
Interval cleared
PS G:\Semester 7\701\node practical\assignment1\que10> cd ..
```

## Q-11



The image shows a Visual Studio Code editor window with a file named `q11.js` open. The file contains the following JavaScript code:

```
1 module.exports = {
2   capitalizeFirst: (str) => str.charAt(0).toUpperCase() + str.slice(1),
3   isPalindrome: (str) => str === str.split('').reverse().join(''),
4   // Complexity is 7 it's time to do something...
5   isPrime: (num) => {
6     if (num < 2) return false;
7     for (let i = 2; i <= Math.sqrt(num); i++) {
8       if (num % i === 0) return false;
9     }
10    return true;
11  }
12};
```

The terminal window at the bottom shows the output of the command `npm publish` in a PowerShell prompt:

```
PS G:\Semester 7\01\node practical\assignment1\que11> npm publish
npm notice
npm notice  que_11-k@1.0.3
npm notice 7arball Contents
npm notice 444B package.json
npm notice 339B q11.js
npm notice 7arball Details
npm notice name: que_11-k
npm notice version: 1.0.3
npm notice filename: que_11-k-1.0.3.tgz
npm notice package size: 562 B
npm notice unpacked size: 783 B
npm notice shasum: 4f9e275c8f843e828be7ad8dbf5cd878139f2e
npm notice integrity: sha512-cF8kXDTUJLz[...]9Wn1Doo7Hb=====
npm notice total files: 2
npm notice
npm notice Publishing to https://registry.npmjs.org/ with tag latest and default access
+ que_11-k@1.0.3
PS G:\Semester 7\01\node practical\assignment1\que11> npm i que_11-k
added 1 package, and audited 2 packages in 4s
```

The status bar at the bottom indicates the file is at line 12, column 3, using UTF-8 encoding with CRLF line endings. The language is set to JavaScript, and the editor is using the Prettier formatter.