

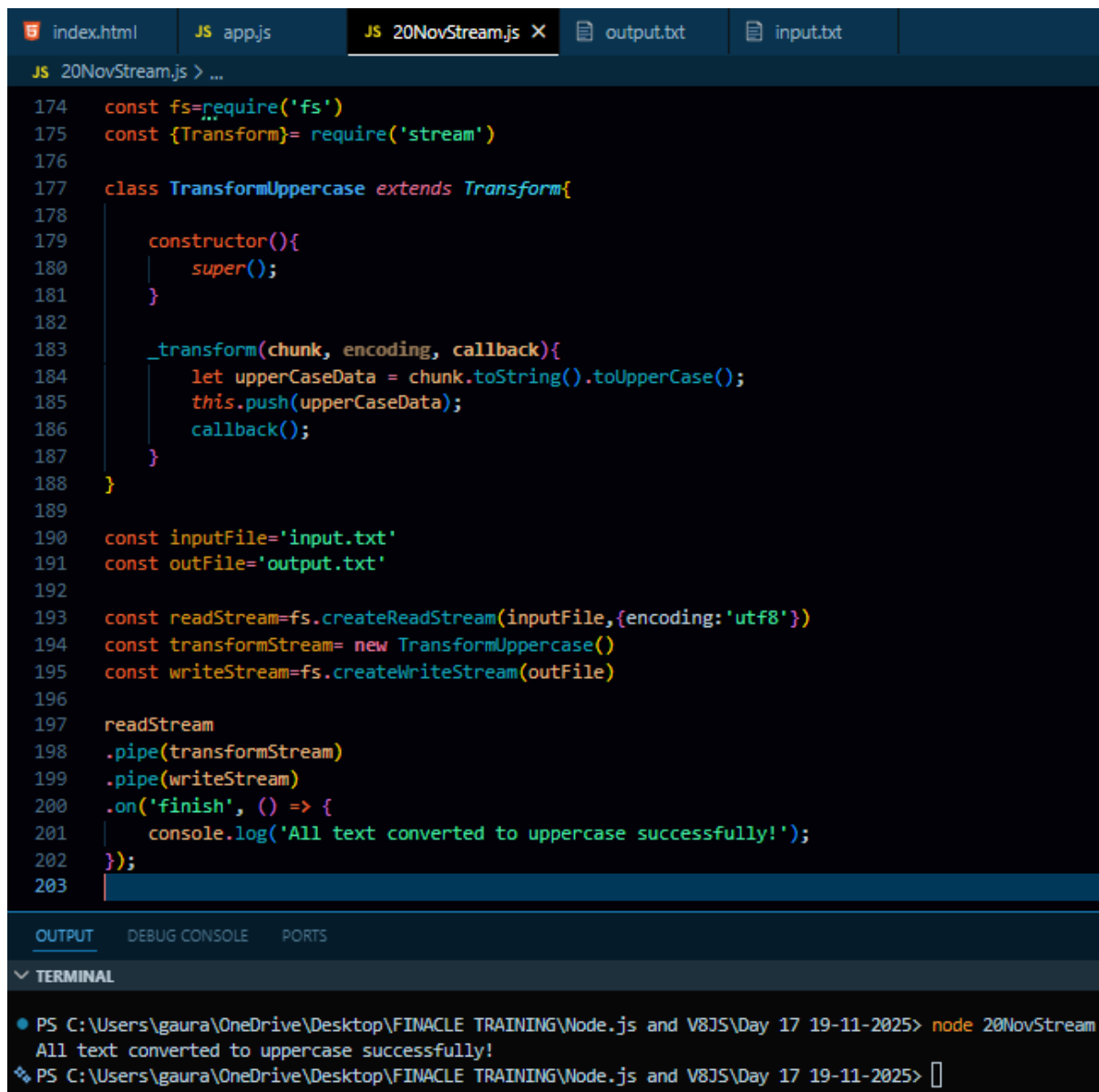
Class Assignment

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Code :

(1) convert text into uppercase from input file to output file.



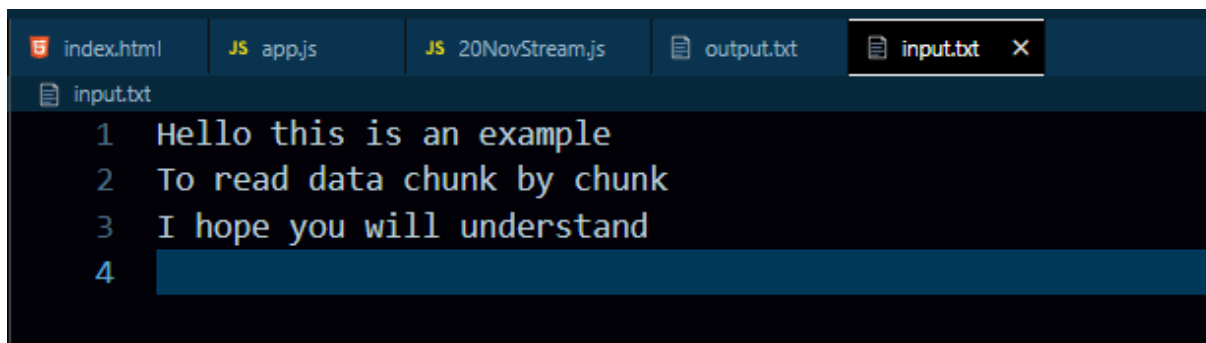
```
index.html JS app.js JS 20NovStream.js X output.txt input.txt
JS 20NovStream.js > ...
174 const fs=require('fs')
175 const {Transform}= require('stream')
176
177 class TransformUppercase extends Transform{
178
179     constructor(){
180         super();
181     }
182
183     _transform(chunk, encoding, callback){
184         let upperCaseData = chunk.toString().toUpperCase();
185         this.push(upperCaseData);
186         callback();
187     }
188 }
189
190 const inputFile='input.txt'
191 const outFile='output.txt'
192
193 const readStream=fs.createReadStream(inputFile,{encoding:'utf8'})
194 const transformStream= new TransformUppercase()
195 const writeStream=fs.createWriteStream(outFile)
196
197 readStream
198 .pipe(transformStream)
199 .pipe(writeStream)
200 .on('finish', () => {
201     console.log('All text converted to uppercase successfully!');
202 });
203
```

OUTPUT DEBUG CONSOLE PORTS

▼ TERMINAL

PS C:\Users\gaura\OneDrive\Desktop\FINACLE TRAINING\Node.js and V8JS\Day 17 19-11-2025> node 20NovStream
All text converted to uppercase successfully!
PS C:\Users\gaura\OneDrive\Desktop\FINACLE TRAINING\Node.js and V8JS\Day 17 19-11-2025> █

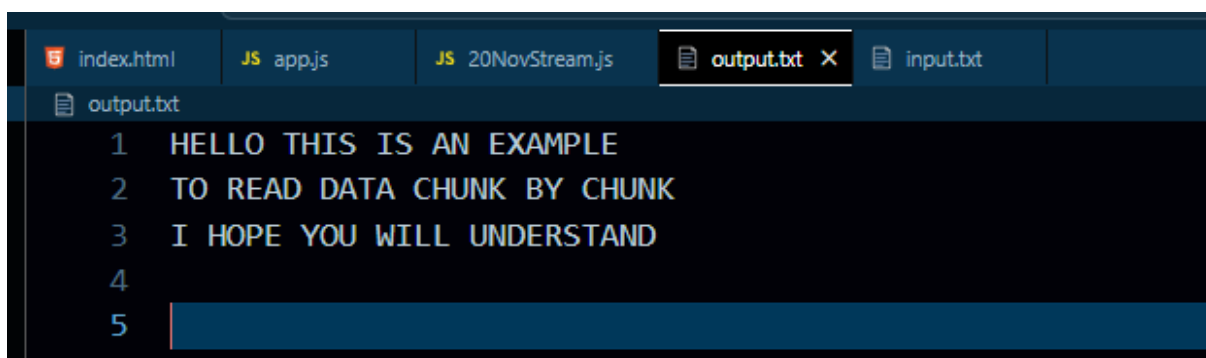
Input File:



A screenshot of a code editor window with a dark theme. The top tab bar shows four tabs: 'index.html', 'JS app.js', 'JS 20NovStream.js', and 'input.txt' (which is active). The editor area displays the text from 'input.txt' with line numbers 1 through 4 on the left. The text is: '1 Hello this is an example', '2 To read data chunk by chunk', '3 I hope you will understand', and '4' followed by a blank line.

```
1 Hello this is an example
2 To read data chunk by chunk
3 I hope you will understand
4
```

Output File:

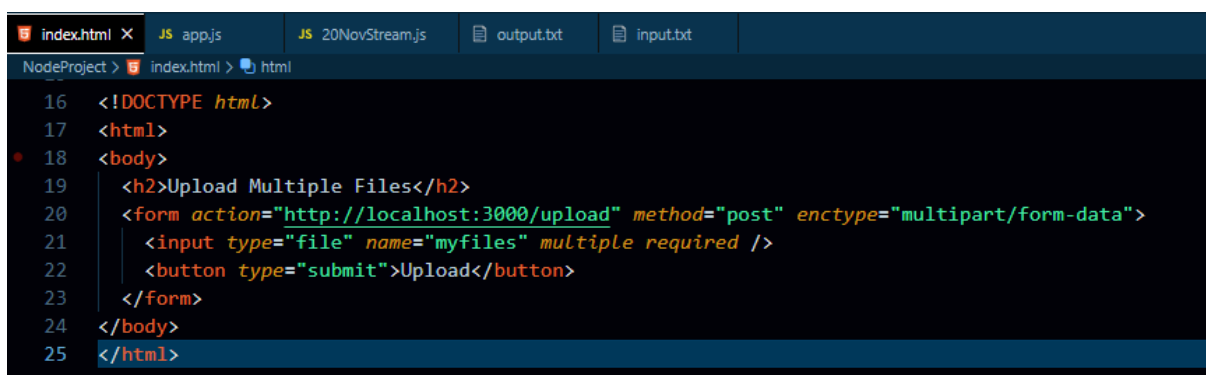


A screenshot of a code editor window with a dark theme. The top tab bar shows four tabs: 'index.html', 'JS app.js', 'JS 20NovStream.js', and 'output.txt' (which is active). The editor area displays the text from 'output.txt' with line numbers 1 through 5 on the left. The text is: '1 HELLO THIS IS AN EXAMPLE', '2 TO READ DATA CHUNK BY CHUNK', '3 I HOPE YOU WILL UNDERSTAND', '4' followed by a blank line, and '5' followed by a blank line.

```
1 HELLO THIS IS AN EXAMPLE
2 TO READ DATA CHUNK BY CHUNK
3 I HOPE YOU WILL UNDERSTAND
4
5
```

(2) code for uploading multiple files

Index.html:



A screenshot of a code editor window with a dark theme. The top tab bar shows five tabs: 'index.html' (active), 'JS app.js', 'JS 20NovStream.js', 'output.txt', and 'input.txt'. The editor area shows the HTML code for 'index.html' with line numbers 16 through 25 on the left. The code is: '16 <!DOCTYPE html>', '17 <html>', '18 <body>', '19 <h2>Upload Multiple Files</h2>', '20 <form action="http://localhost:3000/upload" method="post" enctype="multipart/form-data">', '21 <input type="file" name="myfiles" multiple required />', '22 <button type="submit">Upload</button>', '23 </form>', '24 </body>', and '25 </html>'.

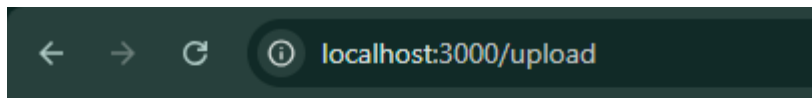
```
16 <!DOCTYPE html>
17 <html>
18 <body>
19   <h2>Upload Multiple Files</h2>
20   <form action="http://localhost:3000/upload" method="post" enctype="multipart/form-data">
21     <input type="file" name="myfiles" multiple required />
22     <button type="submit">Upload</button>
23   </form>
24 </body>
25 </html>
```

App.js:

```
index.html JS app.js x JS 20NovStream.js output.txt input.txt
NodeProject > JS app.js > ...
56 const app = express();
57 const PORT = 3000;
58
59 app.use('/uploads', express.static(path.join(__dirname, 'uploads')));
60
61 const storage = multer.diskStorage({
62   destination: (req, file, cb) => cb(null, 'uploads/'),
63   filename: (req, file, cb) => cb(null, Date.now() + path.extname(file.originalname))
64 });
65
66 const upload = multer({ storage });
67
68 app.post('/upload', upload.array('myfiles', 10), (req, res) => {
69   if (!req.files || req.files.length === 0) {
70     return res.status(400).send('No files were uploaded.');
```

```
71   }
72
73   console.log(`${req.files.length} files uploaded.`);
74
75   let responseHtml = '<h2>Files uploaded successfully!</h2><ul>';
76
77   req.files.forEach(file => {
78     responseHtml += `<li><a href="/uploads/${file.filename}">${file.originalname}</a> (${file.filename})</li>`;
79     console.log('File uploaded: ${file.filename}');
80   });
81
82   responseHtml += '</ul>';
83   res.send(responseHtml);
84 });
85
86 app.get('/download/:filename', (req, res) => {
87   const filePath = path.join(__dirname, 'uploads', req.params.filename);
88   res.download(filePath, (err) => {
89     if (err) {
90       console.error('Error downloading:', err);
91       res.status(500).send('Error in download.');
```

```
92     }
93   });
94 });
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