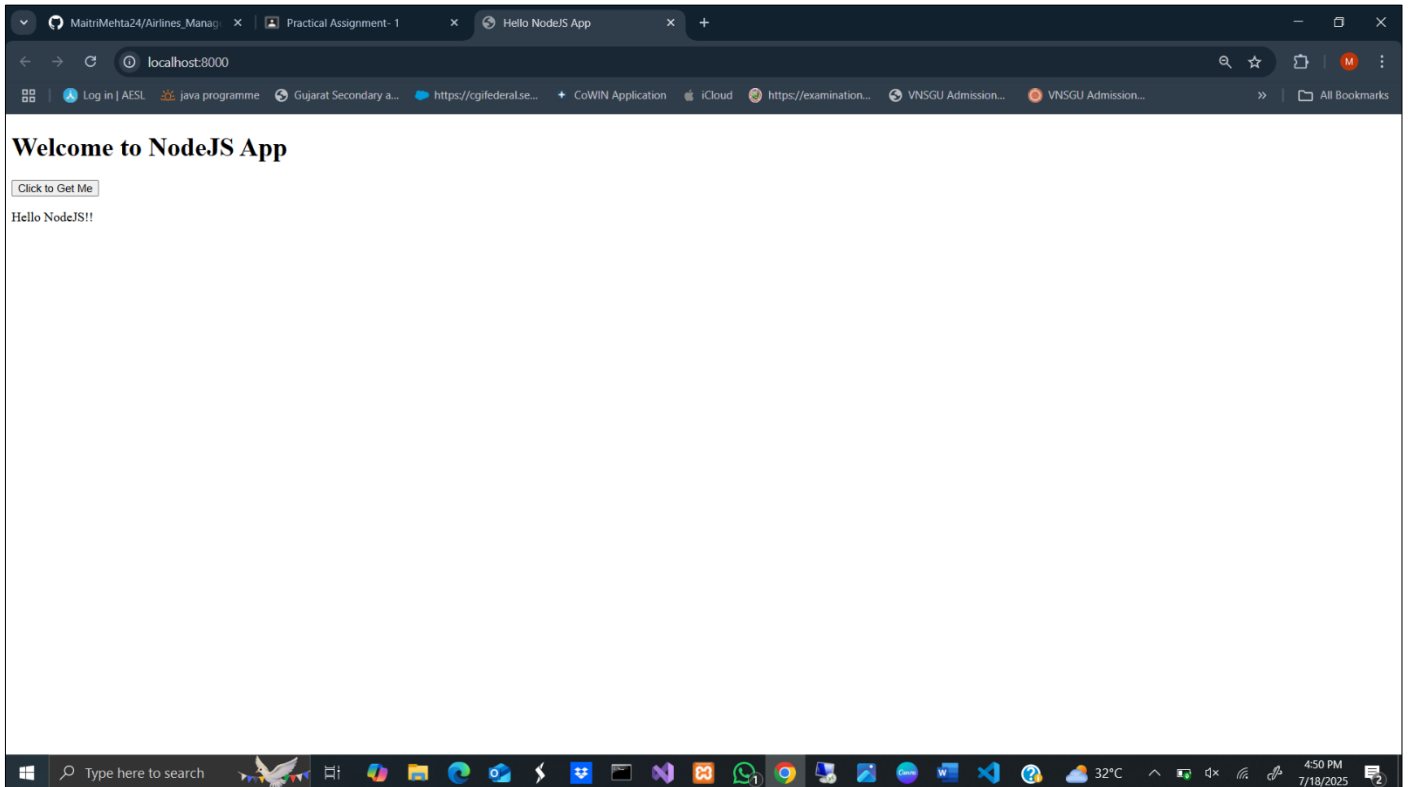


Name: Mehta Maitri Chetan

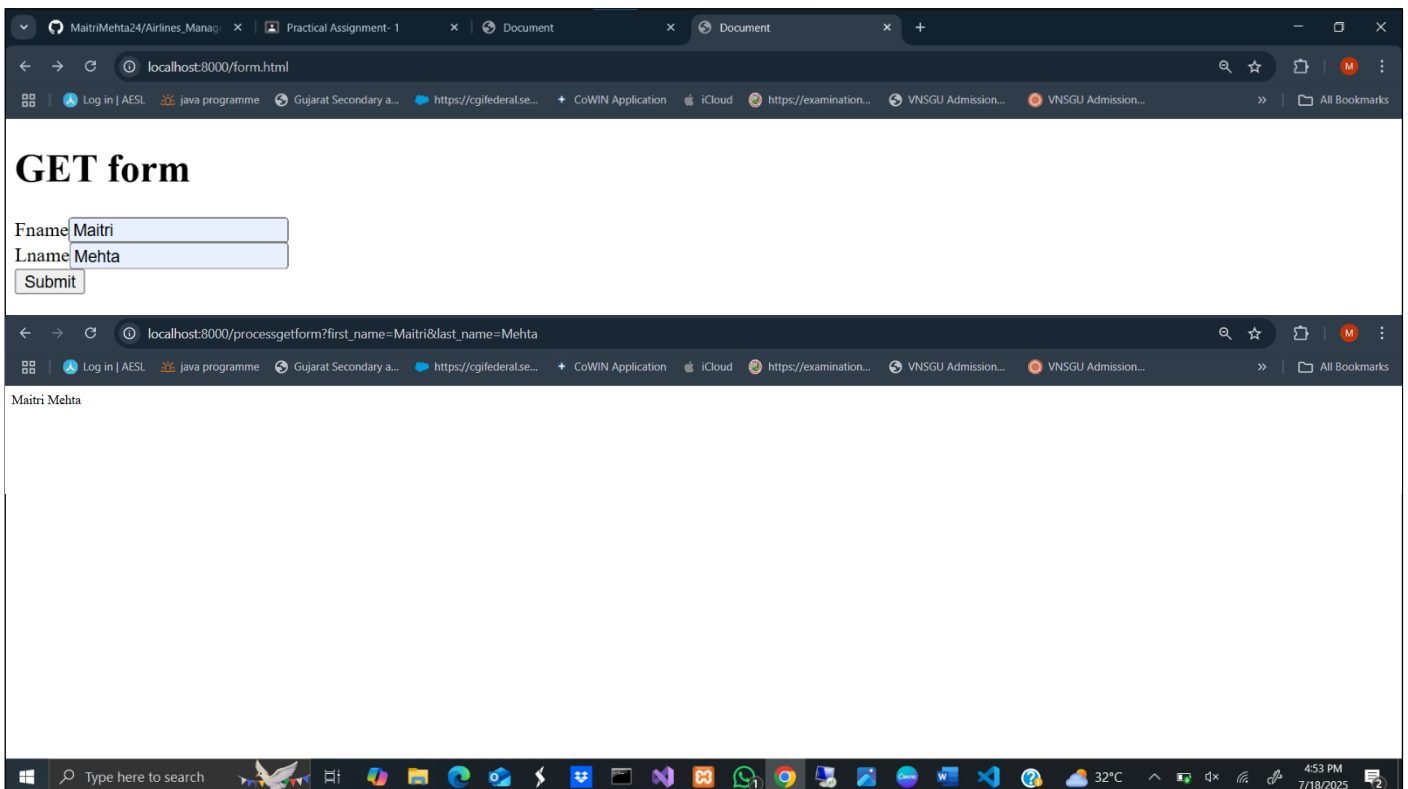
Roll No: 59

Div: Semester-7-B

Ques 1:



Ques 2:



### Ques 3:

```
function getResponse(userInput) {  
  } else if (input.includes( exam )) {  
    return "Exams are held at the end of each semester.";  
  } else if (input.includes("result")) {  
    return "Results are declared within a month after exams.";  
  } else if (input.includes("help")) {  
    return "You can ask about semester, course, exam, or result.";  
  } else {  
    return "I don't understand. Type 'help' to see what you can ask."  
  }  
}
```

PS C:\Users\admin\Downloads\J.P.DAWAR INSTITUTE OF SCIENCE AND TECHNO\SEMESTER-7\COLLAGE CODES\059\_MaitriMehta\_701\_A1\Ques3> node "c:\Users\admin\Downloads\J.P.DAWAR INSTITUTE OF SCIENCE AND TECHNO\SEMESTER-7\COLLAGE CODES\059\_MaitriMehta\_701\_A1\Ques3\app.js"

Welcome to the Student Helpdesk Chatbot!  
Type your question or type 'exit' to quit.

You: how many semesters are there?  
Bot: There are 8 semesters in total. Each lasts 6 months.

You: where I can find the Courses details?  
Bot: You can check the course details on the student portal.

You: ehjbdcij  
Bot: Sorry, I don't understand. Type 'help' to see what you can ask.

You: when results are declared?  
Bot: Results are declared within a month after exams.

You: exit  
♥ Goodbye!  
PS C:\Users\admin\Downloads\J.P.DAWAR INSTITUTE OF SCIENCE AND TECHNO\SEMESTER-7\COLLAGE CODES\059\_MaitriMehta\_701\_A1\Ques3>

### Ques 4:

```
var fs = require("fs");  
var zlib = require('zlib');  
  
fs.createReadStream('./file1.txt')  
  .pipe(zlib.createGzip())  
  .pipe(fs.createWriteStream('./file3.txt.gz'));  
  
console.log("File Compressed.");
```

PS C:\Users\admin\Downloads\J.P.DAWAR INSTITUTE OF SCIENCE AND TECHNO\SEMESTER-7\COLLAGE CODES\059\_MaitriMehta\_701\_A1\Ques4> node "c:\Users\admin\Downloads\J.P.DAWAR INSTITUTE OF SCIENCE AND TECHNO\SEMESTER-7\COLLAGE CODES\059\_MaitriMehta\_701\_A1\Ques4\ConvertToZip.js"

File Compressed.  
PS C:\Users\admin\Downloads\J.P.DAWAR INSTITUTE OF SCIENCE AND TECHNO\SEMESTER-7\COLLAGE CODES\059\_MaitriMehta\_701\_A1\Ques4>

## Ques 5:

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

```
1 const fs = require("fs");
2 const zlib = require("zlib");
3
4 fs.createReadStream("./file3.txt.gz")
5   .pipe(zlib.createGunzip())
6   .pipe(fs.createWriteStream("./file2.txt"));
7
8 console.log("File Decompressed.");
9
```

The terminal at the bottom shows the command `node "c:\Users\admin\Downloads\J.P.DAWAR INSTITUTE OF SCIENCE AND TECHNO\SEMESTER-7\COLLAGE CODES\059_MaitriMehta_701_A1\Ques5> node "c:\Users\admin\Downloads\J.P.DAWAR INSTITUTE OF SCIENCE AND TECHNO\SEMESTER-7\COLLAGE CODES\059_MaitriMehta_701_A1\Ques5\UnZipTheFile.js"` being executed, resulting in the output `File Decompressed.`

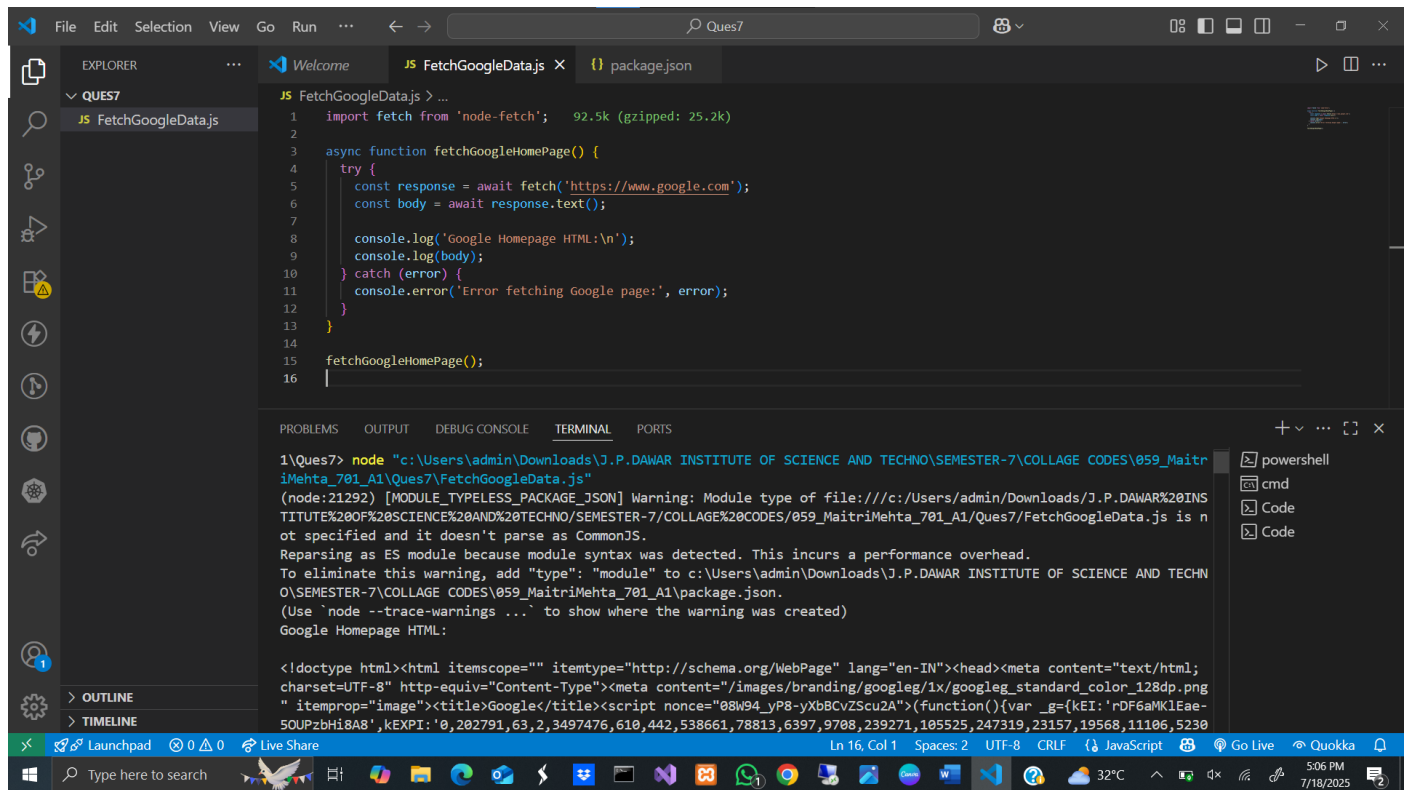
## Ques 6:

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

```
1 const fs= require("fs").promises;
2
3 fs.unlink("./file-to-delete.txt")
4   .then(()=>{
5     console.log("File Deleted Successfully...");
6   }).catch((error)=>{
7     console.log("Error in Deleting File: "+error);
8   });
9
10
```

The terminal at the bottom shows the command `node "c:\Users\admin\Downloads\J.P.DAWAR INSTITUTE OF SCIENCE AND TECHNO\SEMESTER-7\COLLAGE CODES\059_MaitriMehta_701_A1\Ques6> node "c:\Users\admin\Downloads\J.P.DAWAR INSTITUTE OF SCIENCE AND TECHNO\SEMESTER-7\COLLAGE CODES\059_MaitriMehta_701_A1\Ques6\DeleteFile.js"` being executed, resulting in the output `File Deleted Successfully...`

## Ques 7:



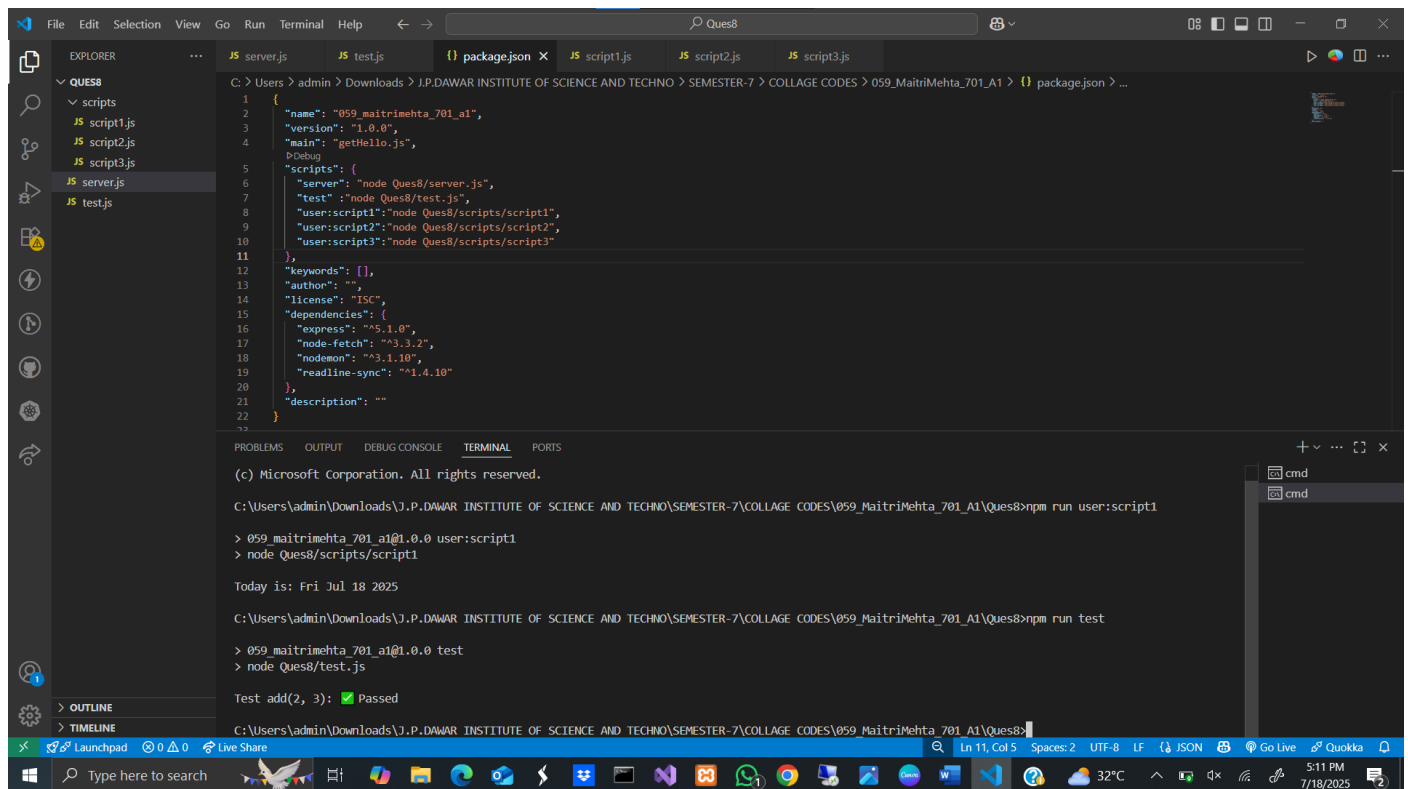
The screenshot shows the VS Code editor with a file named `FetchGoogleData.js` open. The code in the file is as follows:

```
1 import fetch from 'node-fetch';
2
3 async function fetchGoogleHomePage() {
4   try {
5     const response = await fetch('https://www.google.com');
6     const body = await response.text();
7
8     console.log('Google Homepage HTML:\n');
9     console.log(body);
10  } catch (error) {
11    console.error('Error fetching Google page:', error);
12  }
13 }
14
15 fetchGoogleHomePage();
16
```

The terminal output shows a warning from Node.js about the module type of the file and the Google Homepage HTML content:

```
1\Ques7> node "c:\Users\admin\Downloads\J.P.DAWAR INSTITUTE OF SCIENCE AND TECHNO\SEMESTER-7\COLLAGE CODES\059_MaitriMehta_701_A1\Ques7\FetchGoogleData.js"
(node:21292) [MODULE_TYPELESS_PACKAGE_JSON] Warning: Module type of file:///c:/Users/admin/Downloads/J.P.DAWAR%20INSTITUTE%20OF%20SCIENCE%20AND%20TECHNO/SEMESTER-7/COLLAGE%20CODES/059_MaitriMehta_701_A1/Ques7/FetchGoogleData.js is not specified and it doesn't parse as CommonJS.
Reparsing as ES module because module syntax was detected. This incurs a performance overhead.
To eliminate this warning, add "type": "module" to c:\Users\admin\Downloads\J.P.DAWAR INSTITUTE OF SCIENCE AND TECHNO\SEMESTER-7\COLLAGE CODES\059_MaitriMehta_701_A1\package.json.
(Use 'node --trace-warnings ...' to show where the warning was created)
Google Homepage HTML:
<!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/googleg/1x/googleg_standard_color_128dp.png" itemprop="image"><title>Google</title><script nonce="08W94_yP8-yXbBCVZScu2A">(function(){var _g={kEI:'rDF6aMK1Eae-50UPzbHi8A8',kEXPI:'0,202791,63,2,3497476,610,442,538661,78813,6397,9708,239271,105525,247319,23157,19568,11106,5230
```

## Ques 8:



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

```
1 {
2   "name": "059_maitrimantha_701_a1",
3   "version": "1.0.0",
4   "main": "getHello.js",
5   "scripts": {
6     "server": "node Ques8/server.js",
7     "test": "node Ques8/test.js",
8     "user:script1": "node Ques8/scripts/script1",
9     "user:script2": "node Ques8/scripts/script2",
10    "user:script3": "node Ques8/scripts/script3"
11  },
12  "keywords": [],
13  "author": "",
14  "license": "ISC",
15  "dependencies": {
16    "express": "^5.1.0",
17    "node-fetch": "^3.3.2",
18    "nodemon": "^3.1.10",
19    "readline-sync": "^1.4.10"
20  },
21  "description": ""
22 }
```

The terminal output shows the command `npm run user:script1` being executed, followed by the command `npm run test`, which results in a successful test output:

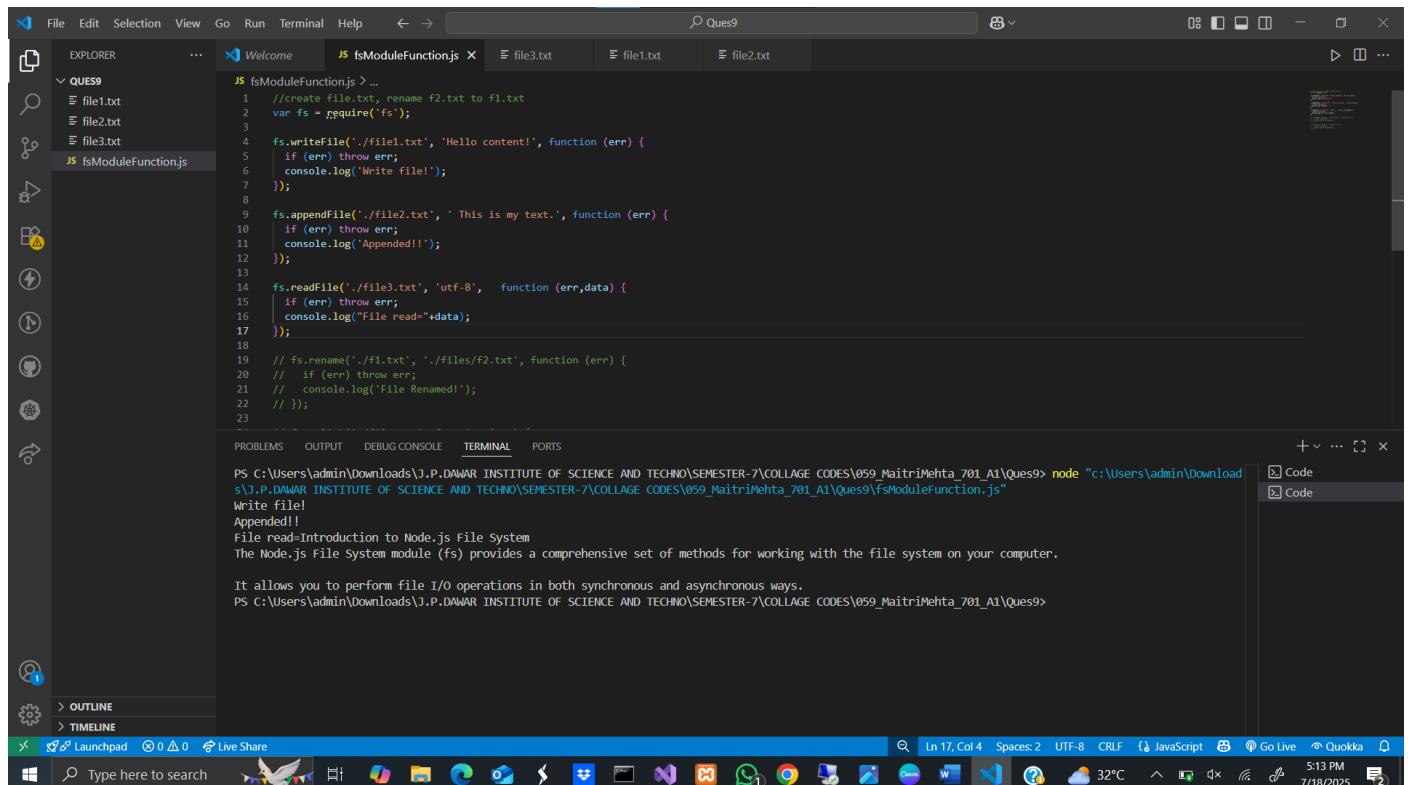
```
C:\Users\admin\Downloads\J.P.DAWAR INSTITUTE OF SCIENCE AND TECHNO\SEMESTER-7\COLLAGE CODES\059_MaitriMehta_701_A1\Ques8>npm run user:script1
> 059_maitrimantha_701_a1@1.0.0 user:script1
> node Ques8/scripts/script1

Today is: Fri Jul 18 2025

C:\Users\admin\Downloads\J.P.DAWAR INSTITUTE OF SCIENCE AND TECHNO\SEMESTER-7\COLLAGE CODES\059_MaitriMehta_701_A1\Ques8>npm run test
> 059_maitrimantha_701_a1@1.0.0 test
> node Ques8/test.js

Test add(2, 3): Passed
```

## Ques 9:



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

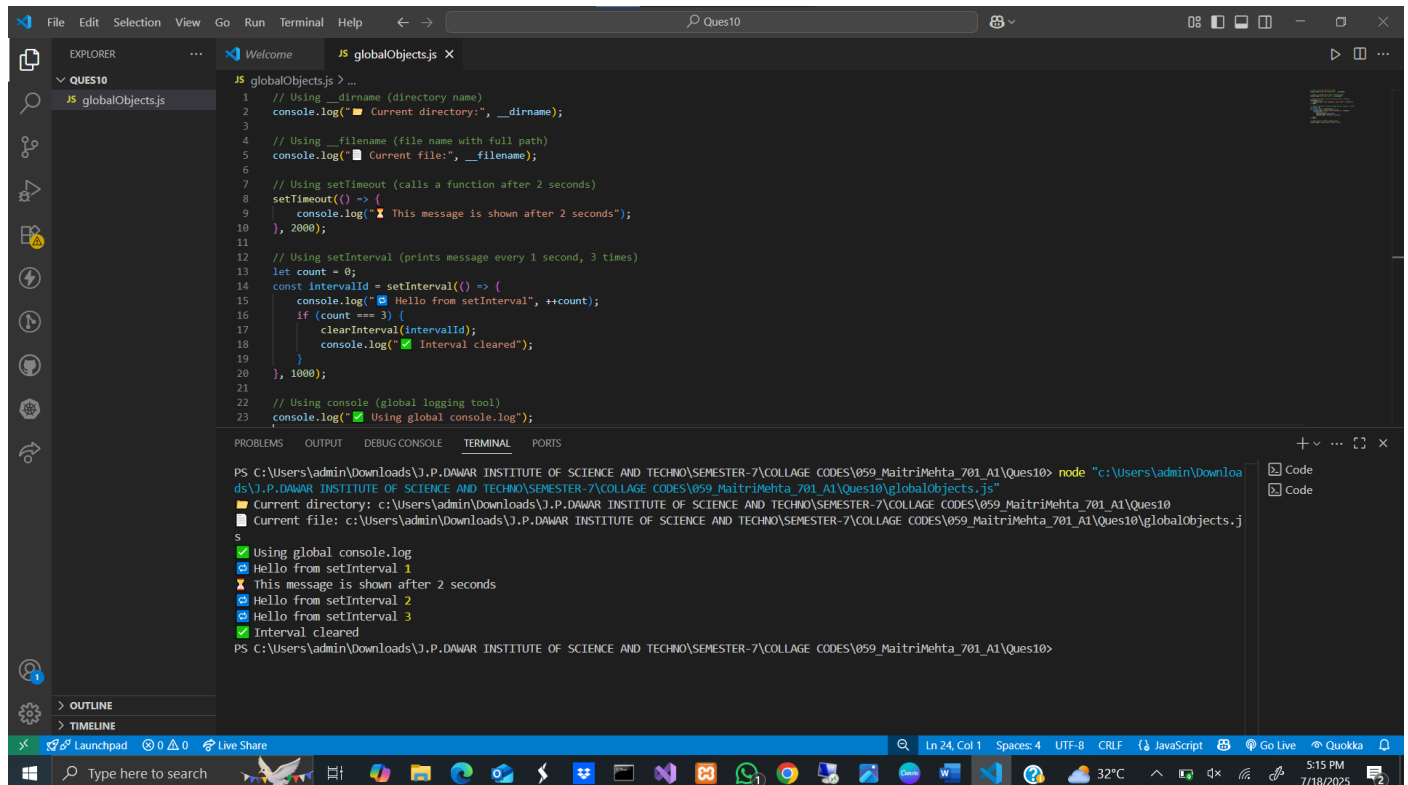
```
1 //create file.txt, rename f2.txt to f1.txt
2 var fs = require('fs');
3
4 fs.writeFile('./file1.txt', 'Hello content!', function (err) {
5   if (err) throw err;
6   console.log('Write file!');
7 });
8
9 fs.appendFile('./file2.txt', ' This is my text.', function (err) {
10   if (err) throw err;
11   console.log('Appended!!');
12 });
13
14 fs.readFile('./file3.txt', 'utf-8', function (err,data) {
15   if (err) throw err;
16   console.log("File read="+data);
17 });
18
19 // fs.rename('./f1.txt', './files/f2.txt', function (err) {
20 //   if (err) throw err;
21 //   console.log('File Renamed!');
22 // });
23
```

The terminal output shows the execution of the script:

```
PS C:\Users\admin\Downloads\J.P.DAWAR INSTITUTE OF SCIENCE AND TECHNO\SEMESTER-7\COLLAGE CODES\059_MaitriMehta_701_A1\Ques9> node "c:\Users\admin\Download
s\J.P.DAWAR INSTITUTE OF SCIENCE AND TECHNO\SEMESTER-7\COLLAGE CODES\059_MaitriMehta_701_A1\Ques9\FsModuleFunction.js"
Write file!
Appended!!
File read=Introduction to Node.js File System
The Node.js File System module (fs) provides a comprehensive set of methods for working with the file system on your computer.

It allows you to perform file I/O operations in both synchronous and asynchronous ways.
PS C:\Users\admin\Downloads\J.P.DAWAR INSTITUTE OF SCIENCE AND TECHNO\SEMESTER-7\COLLAGE CODES\059_MaitriMehta_701_A1\Ques9>
```

## Ques 10:



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

```
1 // Using __dirname (directory name)
2 console.log("■ Current directory:", __dirname);
3
4 // Using __filename (file name with full path)
5 console.log("■ Current file:", __filename);
6
7 // Using setTimeout (calls a function after 2 seconds)
8 setTimeout(() => {
9   console.log("❗ This message is shown after 2 seconds");
10 }, 2000);
11
12 // Using setInterval (prints message every 1 second, 3 times)
13 let count = 0;
14 const intervalId = setInterval(() => {
15   console.log("■ Hello from setInterval", ++count);
16   if (count === 3) {
17     clearInterval(intervalId);
18     console.log("✅ Interval cleared");
19   }
20 }, 1000);
21
22 // Using console (global logging tool)
23 console.log("✅ Using global console.log");
```

The terminal output shows the execution of the script:

```
PS C:\Users\admin\Downloads\J.P.DAWAR INSTITUTE OF SCIENCE AND TECHNO\SEMESTER-7\COLLAGE CODES\059_MaitriMehta_701_A1\Ques10> node "c:\Users\admin\Downloa
ds\J.P.DAWAR INSTITUTE OF SCIENCE AND TECHNO\SEMESTER-7\COLLAGE CODES\059_MaitriMehta_701_A1\Ques10\globalObjects.js"
■ Current directory: c:\Users\admin\Downloads\J.P.DAWAR INSTITUTE OF SCIENCE AND TECHNO\SEMESTER-7\COLLAGE CODES\059_MaitriMehta_701_A1\Ques10
■ Current file: c:\Users\admin\Downloads\J.P.DAWAR INSTITUTE OF SCIENCE AND TECHNO\SEMESTER-7\COLLAGE CODES\059_MaitriMehta_701_A1\Ques10\globalObjects.js
✅ Using global console.log
■ Hello from setInterval 1
❗ This message is shown after 2 seconds
■ Hello from setInterval 2
■ Hello from setInterval 3
✅ Interval cleared
✅ Using global console.log
PS C:\Users\admin\Downloads\J.P.DAWAR INSTITUTE OF SCIENCE AND TECHNO\SEMESTER-7\COLLAGE CODES\059_MaitriMehta_701_A1\Ques10>
```

## Ques 11:

emoji-log-level  
1.0.0 • Public • Published a few seconds ago

Readme Code Beta 2 Dependencies 0 Dependents 1 Versions Settings

### Emoji Log Level

A simple and colorful console logger for Node.js using emojis and chalk, with custom log levels: info, warn, error, and debug.

### Features

- Colored console output based on log level
- Emoji indicators for better visual logs
- Easy-to-use wrapper functions
- Integrated with Express for real-world use

### Installation

```
npm i emoji-log-level
```

Version	License
1.0.0	ISC
Unpacked Size	Total Files
2.08 kB	4
Last publish	a few seconds ago

User profile dropdown menu:

- Profile
- Packages
- Account
- Billing Info
- Access Tokens
- + Add Organization
- Sign Out

```
1 const express = require("express")
2 const log=require("emoji-log-level") 21.4k (gzipped: 8.2k)
3 const app=express();
4 app.use(express.static("./static")); //built in middleware
5 app.use(express.urlencoded({extended:true})) //built in middleware
6
7 app.get("/processgetform",(req,res)=>{
8   res.send(req.query.first_name+" "+req.query.last_name);
9 });
10
11
12 app.listen(8000,()=>{
13   log.info("Server started http://localhost:8000")
14 });
15
16
```

Terminal output:

```
PS C:\Users\admin\Downloads\J.P.DAWAR INSTITUTE OF SCIENCE AND TECHNO\SEMESTER-7\COLLAGE CODES\059 MaitriMehta_701_A1\Ques2> node "c:\Users\admin\Download
s\J.P.DAWAR INSTITUTE OF SCIENCE AND TECHNO\SEMESTER-7\COLLAGE CODES\059 MaitriMehta_701_A1\Ques2\app.js"
(node:18564) ExperimentalWarning: CommonJS module c:\Users\admin\Downloads\J.P.DAWAR INSTITUTE OF SCIENCE AND TECHNO\SEMESTER-7\COLLAGE CODES\059 MaitriMe
hta_701_A1\Ques2\app.js is loading ES Module c:\Users\admin\Downloads\J.P.DAWAR INSTITUTE OF SCIENCE AND TECHNO\SEMESTER-7\COLLAGE CODES\059_MaitriMehta_7
01_A1\node_modules\emoji-log-level\index.js using require().
Support for loading ES Module in require() is an experimental feature and might change at any time
(Use 'node --trace-warnings ...' to show where the warning was created)
● INFO: Server started http://localhost:8000
```