

Name:- Sodavadiya Yash Mukeshbbai

Stream:- Msc.(ICT) Sem-3

Roll No.:- 59

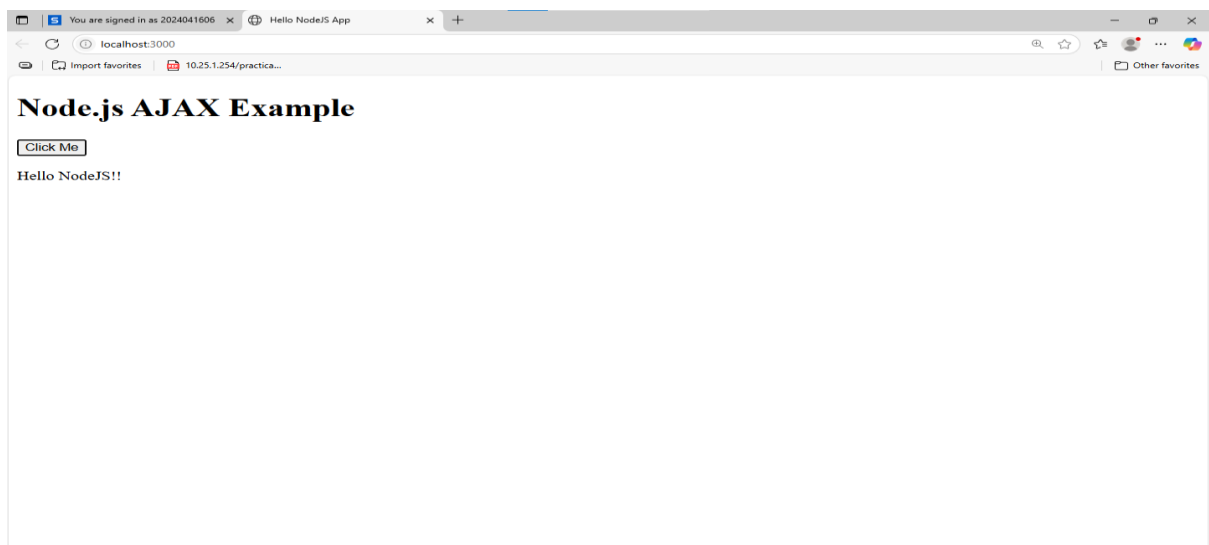
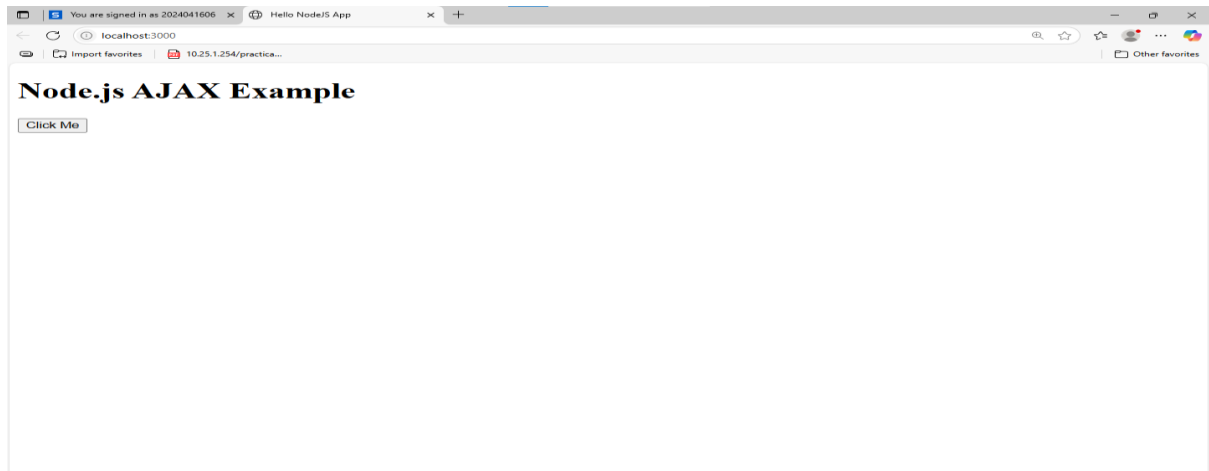
Subject:- Open-Source Web Development

## Assignment-1

1. Develop nodejs application with following requirements:

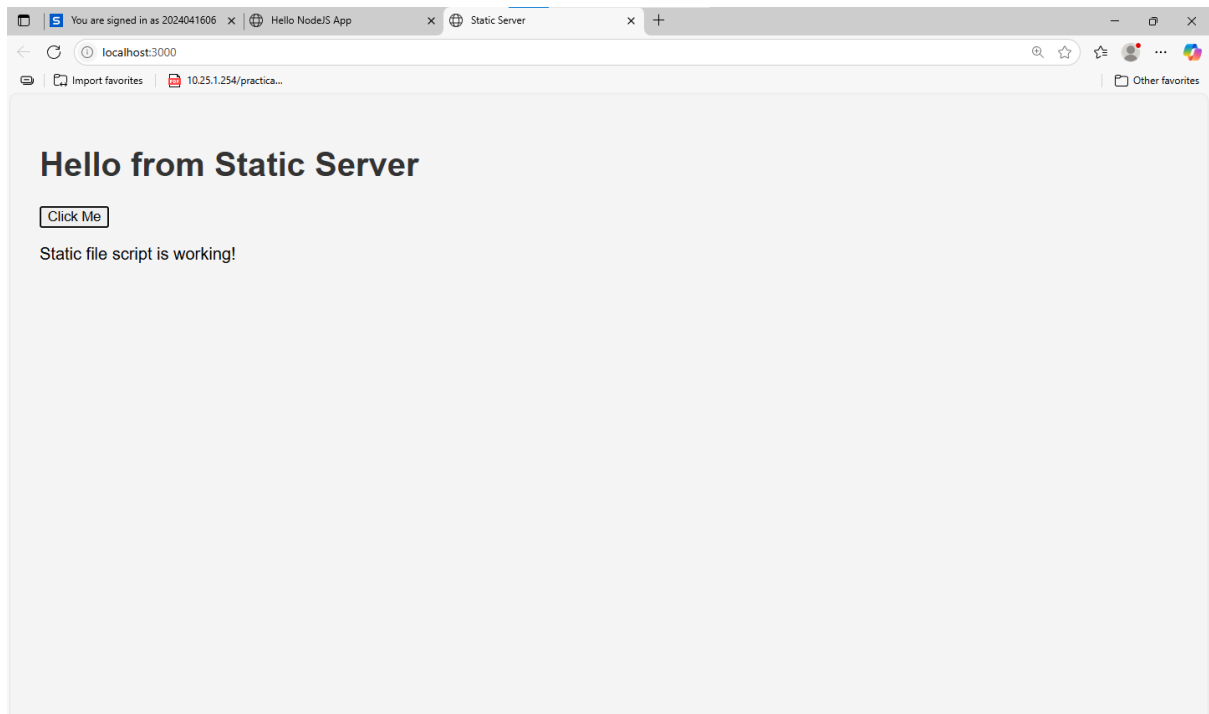
- Develop a route "/gethello" with GET method. It displays "Hello NodeJS!!" as response.
- Make an HTML page and display.
- Call "/gethello" route from HTML page using AJAX call. (Any frontend AJAX call API can be used.)

Output:-



2. Develop a web server which serves static resources.

Output:-



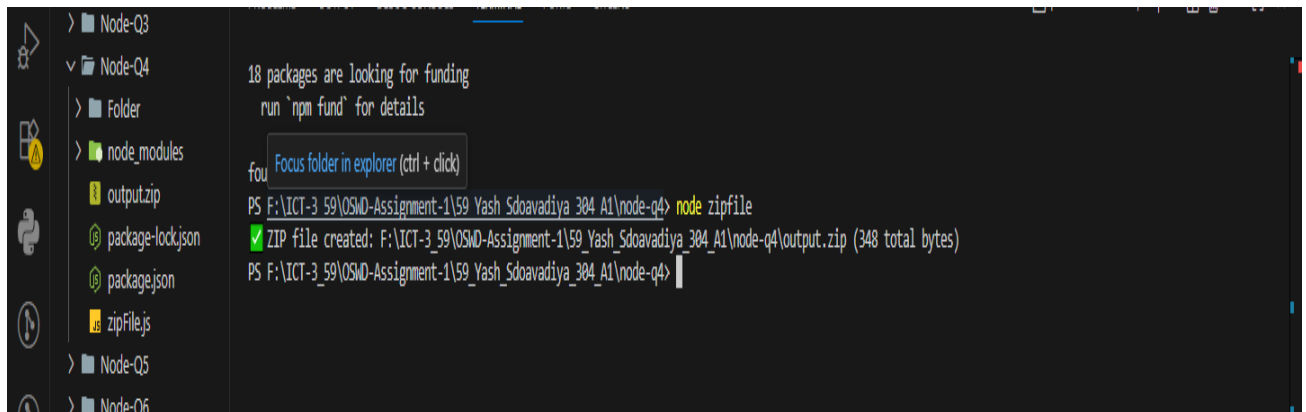
3. Develop a module for domain specific chatbot and use it in a command line application.

Output:-

```
PS F:\ICT-3_59\OSWD-Assignment-1\59_Yash_Sdoavadiya_304_A1\node-q3> node app
👋 Welcome to MovieBot! Ask me about movies (type 'exit' to quit).
You: hello
Bot: Hello! 👋 I'm MovieBot. Ask me about movies, actors, or recommendations!
You: actors
Bot: Leonardo DiCaprio and Robert Downey Jr. are top actors!
You: movies
Bot: Sorry, I can only help with movie-related queries. Try asking about recommendations, latest releases, or actors.
You: 
```

4. Write a program to create a compressed zip file for a folder.

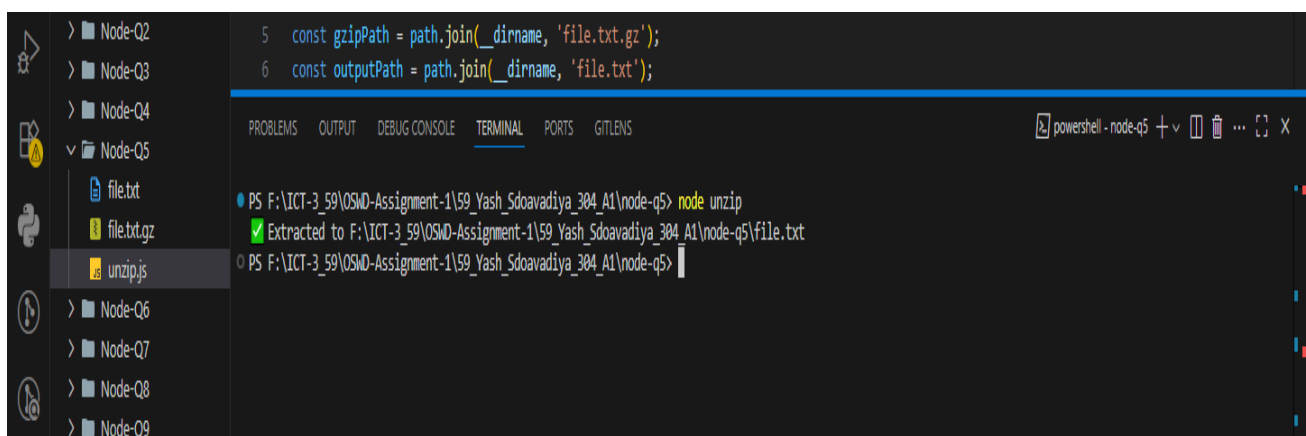
Output:-



```
18 packages are looking for funding
  run `npm fund` for details
PS F:\ICT-3_59\OSWD-Assignment-1\59_Yash_Sdoavadiya_304_A1\node-q4> node zipfile
[?] ZIP file created: F:\ICT-3_59\OSWD-Assignment-1\59_Yash_Sdoavadiya_304_A1\node-q4\output.zip (348 total bytes)
PS F:\ICT-3_59\OSWD-Assignment-1\59_Yash_Sdoavadiya_304_A1\node-q4>
```

5. Write a program to extract a zip file.

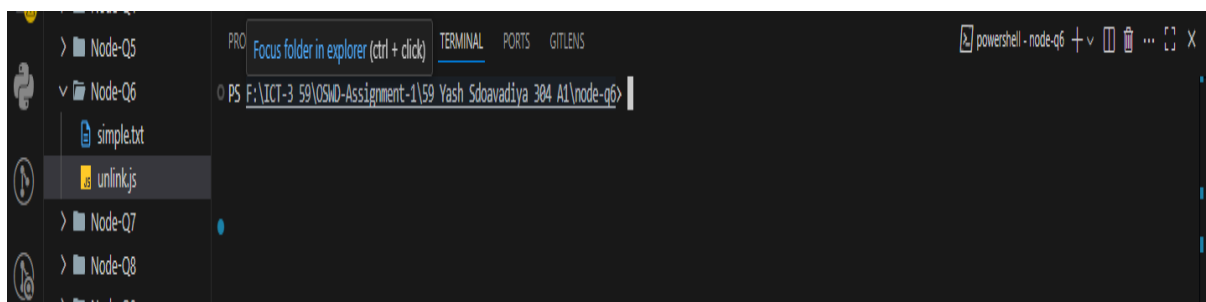
Output:-



```
5 const gzipPath = path.join(__dirname, 'file.txt.gz');
6 const outputPath = path.join(__dirname, 'file.txt');
PS F:\ICT-3_59\OSWD-Assignment-1\59_Yash_Sdoavadiya_304_A1\node-q5> node unzip
[?] Extracted to F:\ICT-3_59\OSWD-Assignment-1\59_Yash_Sdoavadiya_304_A1\node-q5\file.txt
PS F:\ICT-3_59\OSWD-Assignment-1\59_Yash_Sdoavadiya_304_A1\node-q5>
```

6. Write a program to promisify fs.unlink function and call it.

Output:-

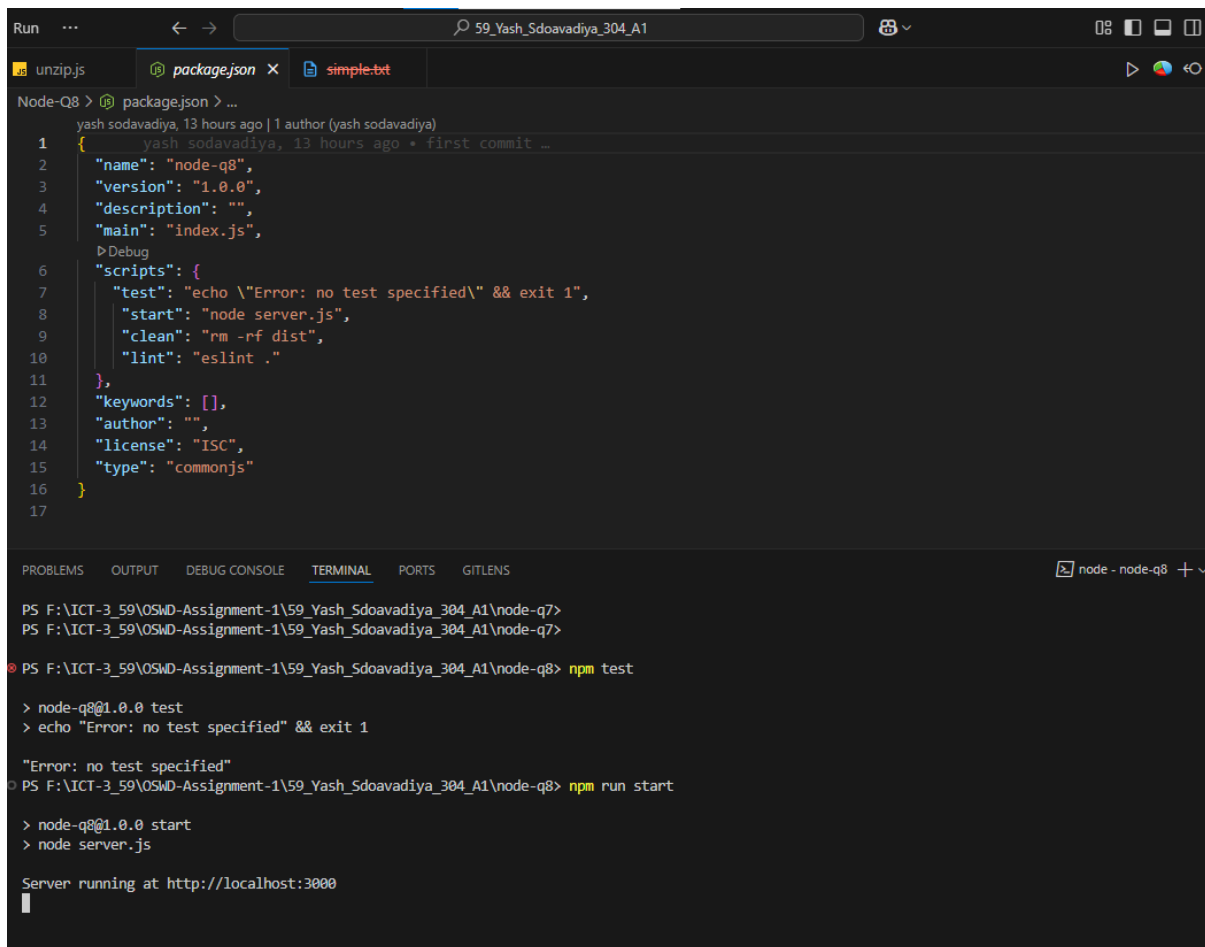


```
PS F:\ICT-3_59\OSWD-Assignment-1\59_Yash_Sdoavadiya_304_A1\node-q6> node unlinkjs
```

[illegible]

8. Set a server script, a test script and 3 user defined scripts in package.json file in your nodejs application.

Output:-



The screenshot shows a VS Code editor with a file named `package.json` open. The file contains the following JSON structure:

```
{
  "name": "node-q8",
  "version": "1.0.0",
  "description": "",
  "main": "index.js",
  "scripts": {
    "test": "echo \"Error: no test specified\" && exit 1",
    "start": "node server.js",
    "clean": "rm -rf dist",
    "lint": "eslint ."
  },
  "keywords": [],
  "author": "",
  "license": "ISC",
  "type": "commonjs"
}
```

The terminal at the bottom shows the following commands and output:

```
PS F:\ICT-3_59\OSWD-Assignment-1\59_Yash_Sdoavadiya_304_A1\node-q7>
PS F:\ICT-3_59\OSWD-Assignment-1\59_Yash_Sdoavadiya_304_A1\node-q7>
PS F:\ICT-3_59\OSWD-Assignment-1\59_Yash_Sdoavadiya_304_A1\node-q8> npm test

> node-q8@1.0.0 test
> echo "Error: no test specified" && exit 1

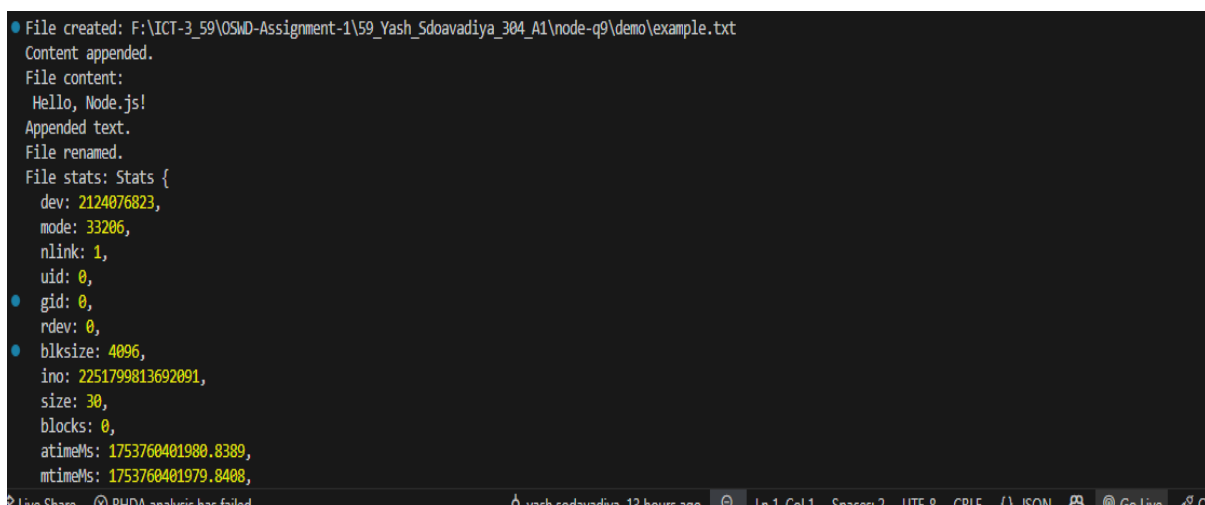
"Error: no test specified"
PS F:\ICT-3_59\OSWD-Assignment-1\59_Yash_Sdoavadiya_304_A1\node-q8> npm run start

> node-q8@1.0.0 start
> node server.js

Server running at http://localhost:3000
```

9. A program which calls useful functions in fs module.

Output:-



The screenshot shows a VS Code terminal with the following output:

```
File created: F:\ICT-3_59\OSWD-Assignment-1\59_Yash_Sdoavadiya_304_A1\node-q9\demo\example.txt
Content appended.
File content:
Hello, Node.js!
Appended text.
File renamed.
File stats: Stats {
  dev: 2124076823,
  mode: 33206,
  nlink: 1,
  uid: 0,
  gid: 0,
  rdev: 0,
  blksize: 4096,
  ino: 2251799813692091,
  size: 30,
  blocks: 0,
  atimeMs: 1753760401980.8389,
  mtimeMs: 1753760401979.8408,
```

10. A program which uses global objects in nodejs.

Output:-

```
PS F:\ICT-3_59\OSWD-Assignment-1\59_Yash_Sdoavadiya_304_A1\node-q10> node global-node
Using global objects in Node.js
Current Directory: F:\ICT-3_59\OSWD-Assignment-1\59_Yash_Sdoavadiya_304_A1\node-q10
Current File: F:\ICT-3_59\OSWD-Assignment-1\59_Yash_Sdoavadiya_304_A1\node-q10\global-node.js
Process ID: 11556
Node Version: v18.18.2
Platform: win32
App Name from global object: Global Demo App
Interval count: 1
2 seconds passed using setTimeout
Interval count: 2
Interval count: 3
Interval stopped
PS F:\ICT-3_59\OSWD-Assignment-1\59_Yash_Sdoavadiya_304_A1\node-q10>
```

11. Develop a useful package and publish it on npmjs.com

Output:-

```
PS F:\ICT-3_59\OSWD-Assignment-1\59_Yash_Sdoavadiya_304_A1\node-q11> npm publish
>>
npm notice
npm notice 📦 greet-59-yash@1.0.0
npm notice === Tarball Contents ===
npm notice 75B greet_use.js
npm notice 100B index.js
npm notice 209B package.json
npm notice === Tarball Details ===
npm notice name: greet-59-yash
npm notice version: 1.0.0
npm notice filename: greet-59-yash-1.0.0.tgz
npm notice package size: 403 B
npm notice unpacked size: 384 B
npm notice shasum: 1d189f7064ce916d8c3455efeda05fda97ea3bca
npm notice integrity: sha512-JCgNnHo9USGmF[...]4s1529+J+qvZg==
npm notice total files: 3
npm notice
```