MSc. ICT -3rd Sem

Roll No. 10

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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.)

AJAX Call to /gethello

Click to Get Data

Hello NodeJS

2. Develop a web server which serves static resources.

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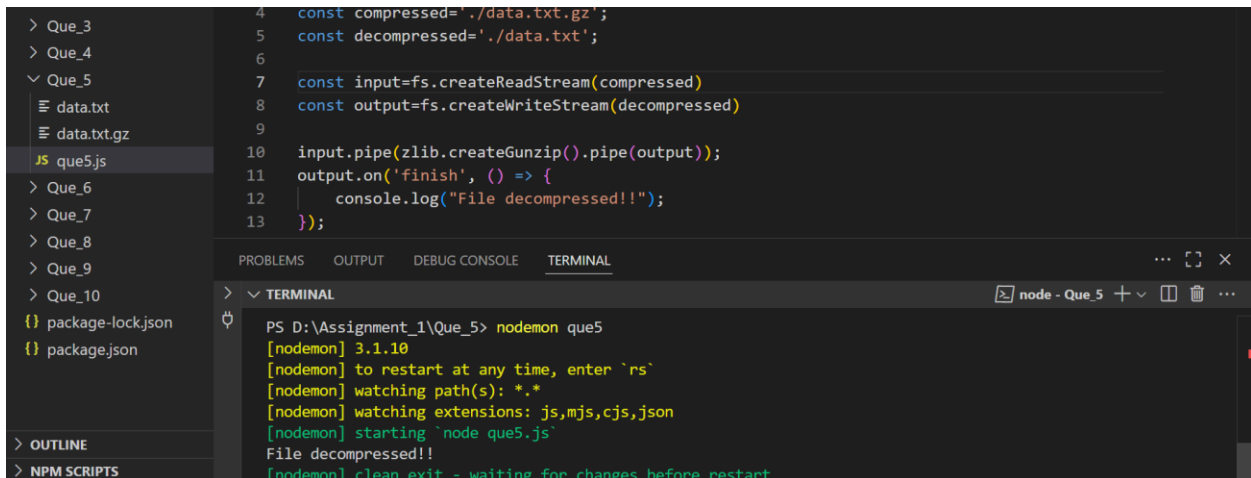
3. Develop a module for domain specific chatbot and use it in a command line application.

```
> ∨ TERMINAL                                                    >_ node - Que_3  + ∨
🔌
    [nodemon] starting `node Chatboat.js`
    You==>hi
    hi
    Bot ==> Hi!
    You==>how do you do?
    how do you do?
    Bot ==> I'm fine ^_^
    You==>
```

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

```
> ∨ TERMINAL                                                    >_ node - Que_4  +
🔌
    [nodemon] 3.1.10
    [nodemon] to restart at any time, enter `rs`
    [nodemon] watching path(s): *.*
    [nodemon] watching extensions: js,mjs,cjs,json
    [nodemon] starting `node que4.js`
    file compressed!!
    [nodemon] clean exit - waiting for changes before restart
```
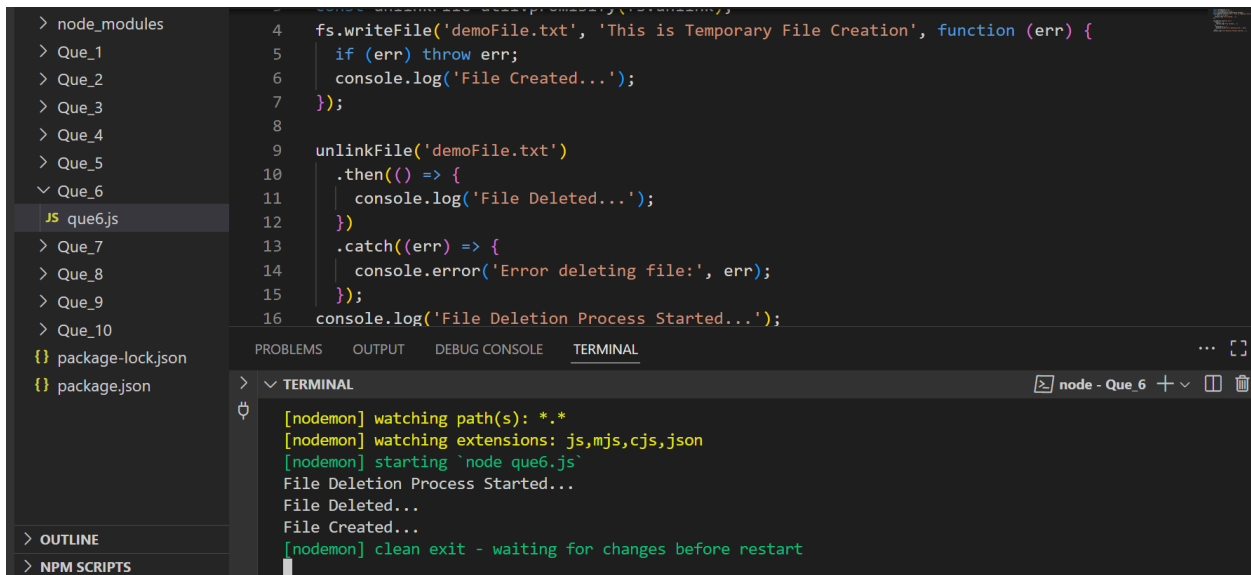
5. Write a program to extract a zip file.

```
4    const compressed='./data.txt.gz';
5    const decompressed='./data.txt';
6
7    const input=fs.createReadStream(compressed)
8    const output=fs.createWriteStream(decompressed)
9
10   input.pipe(zlib.createGunzip().pipe(output));
11   output.on('finish', () => {
12       console.log("File decompressed!!");
13   });
```

```
PS D:\Assignment_1\Que_5> nodemon que5
[nodemon] 3.1.10
[nodemon] to restart at any time, enter `rs`
[nodemon] watching path(s): *.*
[nodemon] watching extensions: js,mjs,cjs,json
[nodemon] starting `node que5.js`
File decompressed!!
[nodemon] clean exit - waiting for changes before restart
```

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


```
4    fs.writeFile('demoFile.txt', 'This is Temporary File Creation', function (err) {
5        if (err) throw err;
6        console.log('File Created...');
7    });
8
9    unlinkFile('demoFile.txt')
10       .then(() => {
11           console.log('File Deleted...');
12       })
13       .catch((err) => {
14           console.error('Error deleting file:', err);
15       });
16   console.log('File Deletion Process Started...');
```

```
[nodemon] watching path(s): *.*
[nodemon] watching extensions: js,mjs,cjs,json
[nodemon] starting `node que6.js`
File Deletion Process Started...
File Deleted...
File Created...
[nodemon] clean exit - waiting for changes before restart
```

7. Fetch data of google page using note-fetch using async-await model.

```javascript
1
2    async function fetchGoogleHomePage() {
3      try {
4        const response = await fetch('https://www.google.com');
5        const data = await response.text();
6        console.log(data);
7      } catch (error) {
8        console.error('Error fetching Google page:', error.message);
9      }
10   }
```

```
ogle.jl={bfl:0,dw:false,eli:false,ine:false,ubm:false,uwp:true,vs:false};})();(function(){var pmc='{\x2d\x22
:{},\x22sb_he\x22:{\x22client\x22:\x22heirloom-hp\x22,\x22dh\x22:true,\x22ds\x22:\x22\x22,\x22host\x22:\x22go
ogle.com\x22,\x22jsonp\x22:true,\x22msgs\x22:{\x22cibl\x22:\x22Clear Search\x22,\x22dym\x22:\x22Did you mean:
\x22,\x22lcky\x22:\x22I\\u0026#39;m Feeling Lucky\x22,\x22lml\x22:\x22Learn more\x22,\x22psrc\x22:\x22This se
arch was removed from your \\u003Ca href\x3d\\\x22/history\\\x22\\u003EWeb History\\u003C/a\\u003E\x22,\x22ps
rl\x22:\x22Remove\x22,\x22sbit\x22:\x22Search by image\x22,\x22srch\x22:\x22Google Search\x22},\x22ovr\x22:{}
,\x22pq\x22:\x22\x22,\x22rfs\x22:[],\x22stok\x22:\x22fuZcmpEsF_iByW9Wq_6hjd-K92U\x22}}';google.pmc=JSON.parse
(pmc);})();</script></body></html>
[nodemon] clean exit - waiting for changes before restart
```

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

application.


```json
2      "name": "que_8",
3      "version": "1.0.0",
4      "description": "",
5      "main": "server.js",
       ▷ Debug
6      "scripts": {
7        "test": "echo \"Running Test...\" && exit 0",
8        "start": "nodemon server.js",
9        "about":"node about.js",
10       "contact":"node contact.js",
11       "home":"node home.js"
12     },
13     "keywords": [],
14     "author": "",
15     "license": "ISC"
```

```
[nodemon] to restart at any time, enter `rs`
[nodemon] to restart at any time, enter `rs`
[nodemon] watching path(s): *.*
[nodemon] watching extensions: js,mjs,cjs,json
[nodemon] starting `node que8 server.js`
Server running on port 8000
```

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

```
[nodemon] watching extensions: js,mjs,cjs,json
[nodemon] starting `node app.js`
file written successfully..
appending data successfully...
file content:
 hello,this is a same file..
Appending more text.

file renamed...
[nodemon] clean exit - waiting for changes before restart
```

10. A program which uses global objects in nodejs.


```
EXPLORER                    {} package.json        JS que10.js  ×
ASSIGNMENT_1                Que_10 > JS que10.js > ...
  node_modules                 9      setTimeout(() => {
  Que_1                       10        console.log('1 seconds passed');
  Que_2                       11        console.log('App name from global:', global.myAppName);
  Que_3                       12
  Que_4                       13        console.log('Memory usage:', process.memoryUsage());
  Que_5                       14      }, 1000);
  Que_6                       15
  Que_7                       16      console.log('Running on platform:', process.platform);
  Que_8                       17      console.log('Environment:', process.env);
    JS about.js               18
    JS contact.js
    JS home.js           PROBLEMS   OUTPUT   DEBUG CONSOLE   TERMINAL
    {} package.json
    JS server.js         TERMINAL                                            node - Que_10
  Que_9                    [nodemon] starting `node que10.js`
  Que_10                   Current file: D:\Assignment_1\Que_10\que10.js
    JS que10.js            Current directory: D:\Assignment_1\Que_10
  {} package-lock.json     Running on platform: win32
  {} package.json          Environment: {
OUTLINE                      ALLUSERSPROFILE: 'C:\\ProgramData',
NPM SCRIPTS                  APPDATA: 'C:\\Users\\IT CARE\\AppData\\Roaming',
                             CHROME_CRASHPAD_PIPE_NAME: '\\\\.\\pipe\\crashpad_3148_RDPUUACRYDNZXFJA',
                             COLORTERM: 'truecolor',
                             CommonProgramFiles: 'C:\\Program Files\\Common Files',
                             'CommonProgramFiles(x86)': 'C:\\Program Files (x86)\\Common Files',
                             CommonProgramW6432: 'C:\\Program Files\\Common Files',
```

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