# Lesson 05 Demo 06

# Creating HTTP Routes

**Objective:** To create HTTP routes in a Node.js app for handling incoming HTTP requests from a web server

**Tools required:** Node Package Manager and Visual Studio Code

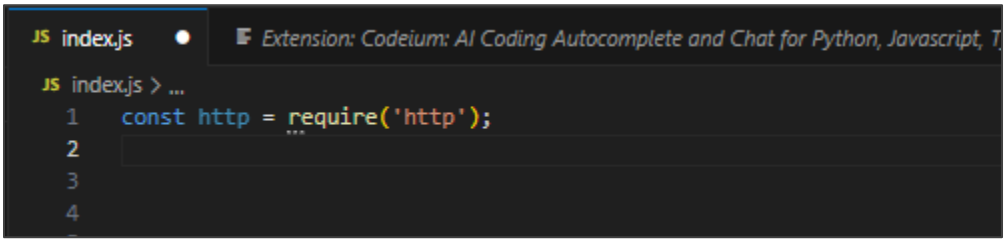
**Prerequisites:** Basic Linux Commands, NPM commands, JavaScript, and HTTP module

Steps to be followed:

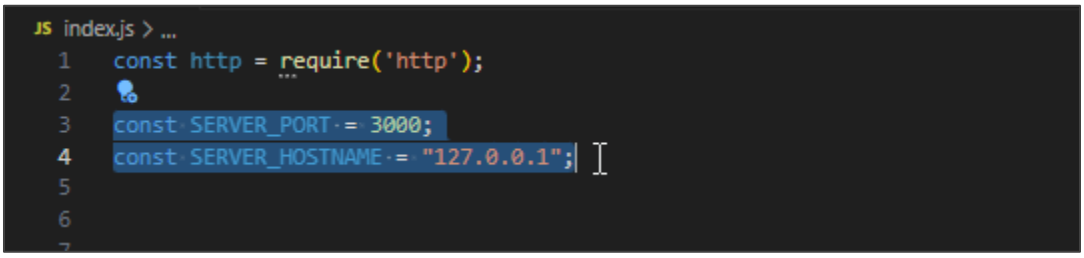
1. Create HTTP routes to handle incoming requests

## Step 1: Create HTTP routes to handle incoming requests

1.1 Import the HTTP module:
**const http = require('http');**




1.2 Create the server port and hostname:
**const SERVER_PORT = 3000;**
**const SERVER_HOSTNAME = "127.0.0.1";**



1.3 Add the function **createServer** to get a reference to the server object:

**const server = http.createServer();**

```
index.js    Extension: Codeium: AI Coding Autocomplete and Chat for Python, Javascript, Typescript, Java, Go, and mo
index.js > ...
1   const http = require('http');
2
3   const SERVER_PORT = 3000;
4   const SERVER_HOSTNAME = "127.0.0.1";
5
6   const server = http.createServer();
7
8
```

1.4 Set the server to listen to various events:

**server.on("listening", () => console.log("Server Listening"))**

**server.on("error", () => console.log("Error Occur while handling request"))**

```
index.js > ...
1   const http = require('http');
2
3   const SERVER_PORT = 3000;
4   const SERVER_HOSTNAME = "127.0.0.1";
5
6   const server = http.createServer();
7
8   server.on("listening", () => console.log("Server Listening"))
9   server.on("error", () => console.log("Error Occur while handling request"))
10
11
```

1.5 Create the endpoints using the **if** condition:

```
server.on("request", (req, res) => {
  const url = req.url;
  if (url === '/') {
    res.setHeader("Content-Type", "text/html");
    res.writeHead(200);
    res.end('<html><body><h1>Welcome to My App</h1></body></html>');
  }
```

1.6 Create another endpoint using the **if** condition where the URL is **/plain-response** and share the quote as a plain text response:

```
if (url === '/plain-response') {
    res.setHeader("Content-Type", "text/plain");
    res.writeHead(200);
    res.end('Search the Candle rather than cursing the Darkness');
}
```

index.js 1 ● Extension: Codeium: AI Coding Autocomplete and Chat for Python, Javascript, Typescript, Java, Go, and more

index.js > ...

```
1  const http = require('http');
2
3  const SERVER_PORT = 3000;
4  const SERVER_HOSTNAME = "127.0.0.1";
5
6  const server = http.createServer();
7
8  server.on("listening", () => console.log("Server Listening"))
9  server.on("error", () => console.log("Error Occur while handling request"))
10
11 server.on("request", (req, res) => {
12   const url = req.url;
13   if (url === '/') {
14       res.setHeader("Content-Type", "text/html");
15       res.writeHead(200);
16       res.end('<html><body><h1>Welcome to My App</h1></body></html>');
17   }
18
19   if (url === '/plain-response') {
20     res.setHeader("Content-Type", "text/plain");
21     res.writeHead(200);
22     res.end('Search the Candle rather than cursing the Darkness');
23 }
```

1.7 Create another endpoint using the **if** condition where the URL is **/json-response** and share the JSON object as a response:

```
if (url === '/json-response') {
      res.setHeader("Content-Type", "application/json")
      res.end(JSON.stringify({
         "platform": process.platform,
         "date": new Date(),
         "message": "Hellos"
      }));
   }
})
```

```
JS index.js > ...
1   const http = require('http');
2
3   const SERVER_PORT = 3000;
4   const SERVER_HOSTNAME = "127.0.0.1";
5
6   const server = http.createServer();
7
8   server.on("listening", () => console.log("Server Listening"))
9   server.on("error", () => console.log("Error Occur while handling request"))
10          any
11  server.on("request", (req, res) => {
12    const url = req.url;
13    if (url === '/') {
14        res.setHeader("Content-Type", "text/html");
15        res.writeHead(200);
16        res.end('<html><body><h1>Welcome to My App</h1></body></html>');
17    }
18
19    if (url === '/plain-response') {
20      res.setHeader("Content-Type", "text/plain");
21      res.writeHead(200);
22      res.end('Search the Candle rather than cursing the Darkness');
23    }
24
25    if (url === '/json-response') {
26      res.setHeader("Content-Type", "application/json")
27      res.end(JSON.stringify({
28          "platform": process.platform,
29          "date": new Date(),
30          "message": "Hellos"
31      }));
32    }
33    })
```

1.8 Specify the port number and hostname:

**server.listen(SERVER_PORT, SERVER_HOSTNAME, () => {**
**console.log(`Server is up and listening on port ${SERVER_PORT}`);**
**})**

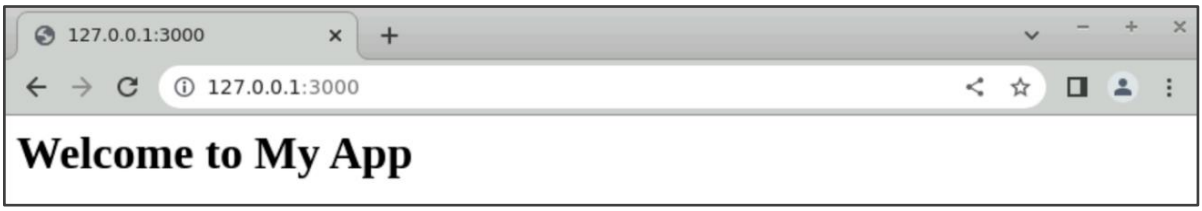
```
JS index.js > ...
server.on("listening", () => console.log("Server Listening"))
server.on("error", () => console.log("Error Occur while handling request"))

server.on("request", (req, res) => {
  const url = req.url;
  if (url === '/') {
      res.setHeader("Content-Type", "text/html");
      res.writeHead(200);
      res.end('<html><body><h1>Welcome to My App</h1></body></html>');
  }

  if (url === '/plain-response') {
    res.setHeader("Content-Type", "text/plain");
    res.writeHead(200);
    res.end('Search the Candle rather than cursing the Darkness');
}

if (url === '/json-response') {
  res.setHeader("Content-Type", "application/json")
  res.end(JSON.stringify({
      "platform": process.platform,
      "date": new Date(),
      "message": "Hellos"
  }));
}
})

server.listen(SERVER_PORT, SERVER_HOSTNAME, () => {
  console.log(`Server is up and listening on port ${SERVER_PORT}`);
})
```

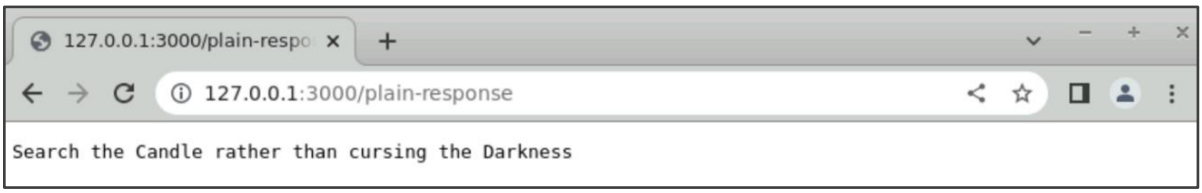
1.9 Test the code by executing the following command in the terminal:

**node index.js**

```
demopython1yopm@ip-172-31-16-204:~/Desktop/nodeProjec/demo4$ node index.js
```

Following are the outputs:





By following these steps, you have successfully created HTTP routes in a Node.js app for handling incoming HTTP requests from a web server.