

Calculator-App using NodeJS

STEP BY STEP PROGRESS USING PICTURES

STEP-1 : Basic Setup

```
C:\Windows\system32\cmd.exe

Microsoft Windows [Version 10.0.19044.1826]
(c) Microsoft Corporation. All rights reserved.

C:\Users\hp>cd C:\Users\hp\Desktop\About_Node_using_ExpressJS

C:\Users\hp\Desktop\About_Node_using_ExpressJS>mkdir Calculator-app

C:\Users\hp\Desktop\About_Node_using_ExpressJS>cd Calculator-app

C:\Users\hp\Desktop\About_Node_using_ExpressJS\Calculator-app>touch calculator.js
Touching calculator.js

C:\Users\hp\Desktop\About_Node_using_ExpressJS\Calculator-app>npm init
This utility will walk you through creating a package.json file.
It only covers the most common items, and tries to guess sensible defaults.

See `npm help init` for definitive documentation on these fields
and exactly what they do.

Use `npm install <pkg>` afterwards to install a package and
save it as a dependency in the package.json file.

Press ^C at any time to quit.
package name: (calculator-app)
version: (1.0.0)
description: Calculator app using NodeJS
entry point: (calculator.js)
test command:
git repository:
keywords:
author: Tyagi
license: (ISC)
```

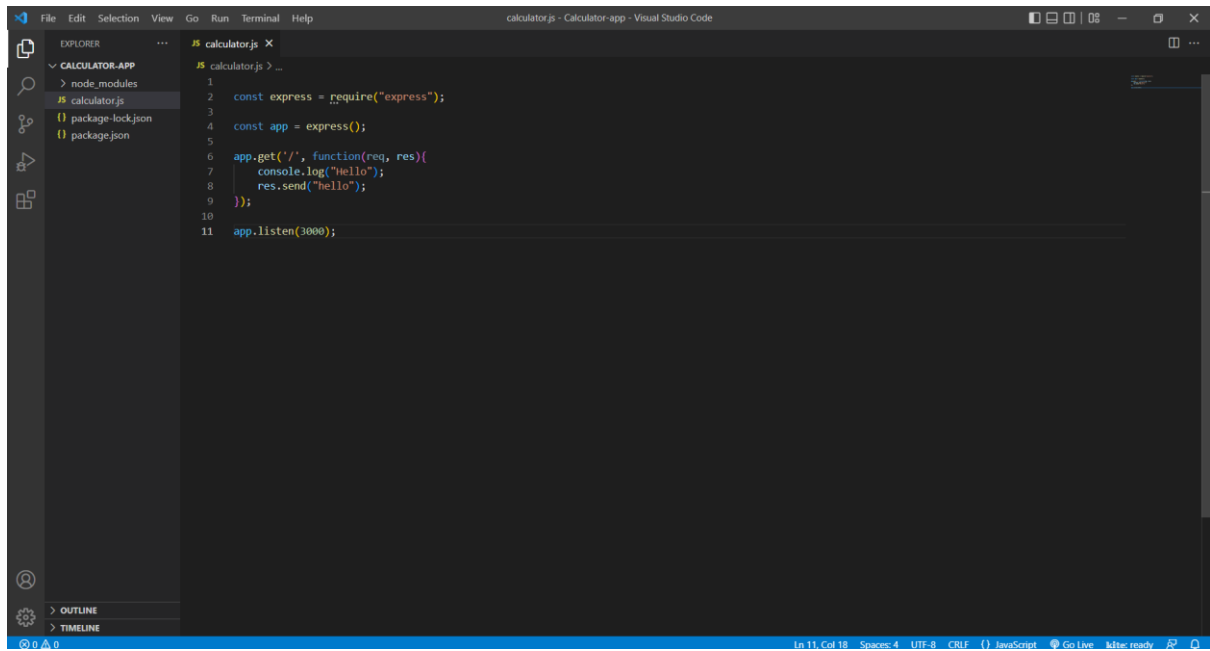
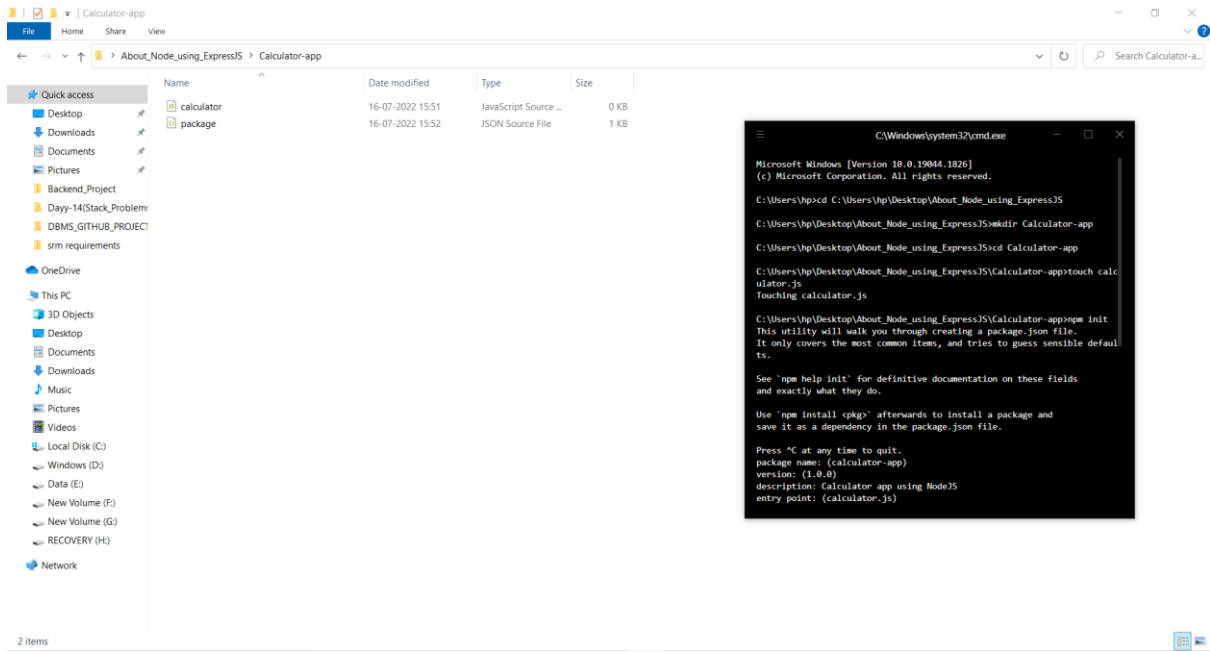
```
C:\Windows\system32\cmd.exe

Press ^C at any time to quit.
package name: (calculator-app)
version: (1.0.0)
description: Calculator app using NodeJS
entry point: (calculator.js)
test command:
git repository:
keywords:
author: Tyagi
license: (ISC)
About to write to C:\Users\hp\Desktop\About_Node_using_ExpressJS\Calculator-app\package.json:

{
  "name": "calculator-app",
  "version": "1.0.0",
  "description": "Calculator app using NodeJS",
  "main": "calculator.js",
  "scripts": {
    "test": "echo \"Error: no test specified\" && exit 1"
  },
  "author": "Tyagi",
  "license": "ISC"
}

Is this OK? (yes)

C:\Users\hp\Desktop\About_Node_using_ExpressJS\Calculator-app>
```



```
C:\Windows\system32\cmd.exe - "node" "C:\Users\hp\AppData\Roaming\npm\node_modules\nodemon\bin\nodemon.js" calculator.js

license: (ISC)
About to write to C:\Users\hp\Desktop\About_Node_using_ExpressJS\Calculator-app\package.json:

{
  "name": "calculator-app",
  "version": "1.0.0",
  "description": "Calculator app using NodeJS",
  "main": "calculator.js",
  "scripts": {
    "test": "echo \"Error: no test specified\" && exit 1"
  },
  "author": "Tyagi",
  "license": "ISC"
}

Is this OK? (yes)

C:\Users\hp\Desktop\About_Node_using_ExpressJS\Calculator-app>npm install express

added 57 packages, and audited 58 packages in 2s

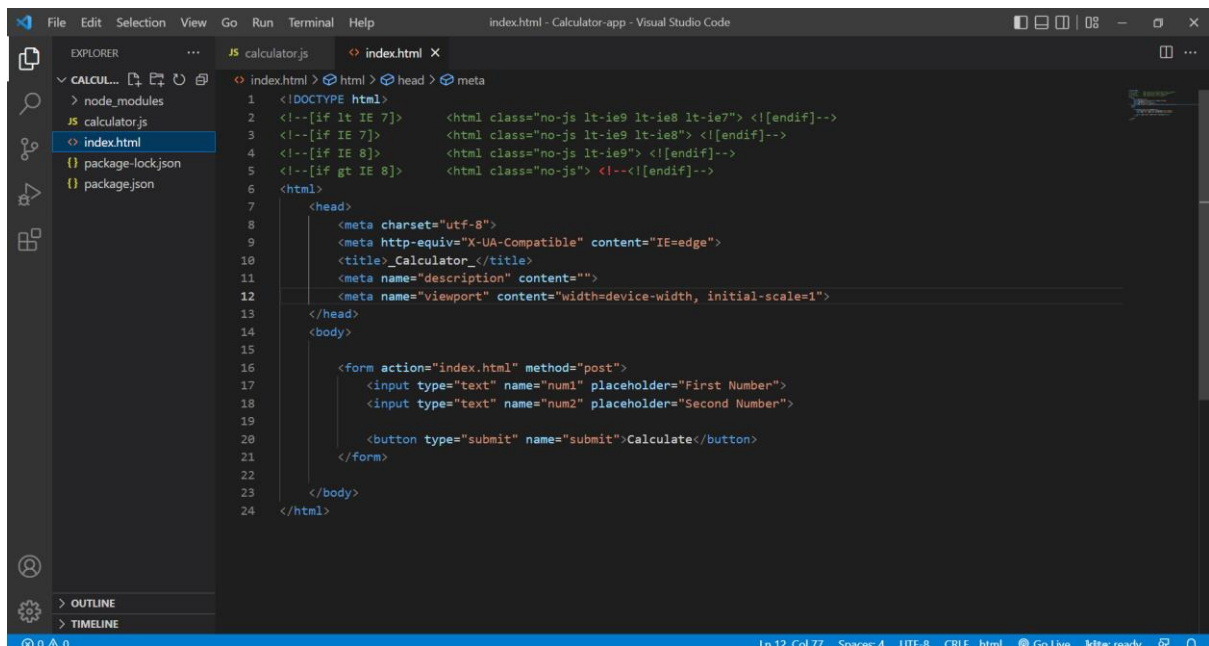
7 packages are looking for funding
  run `npm fund` for details

found 0 vulnerabilities

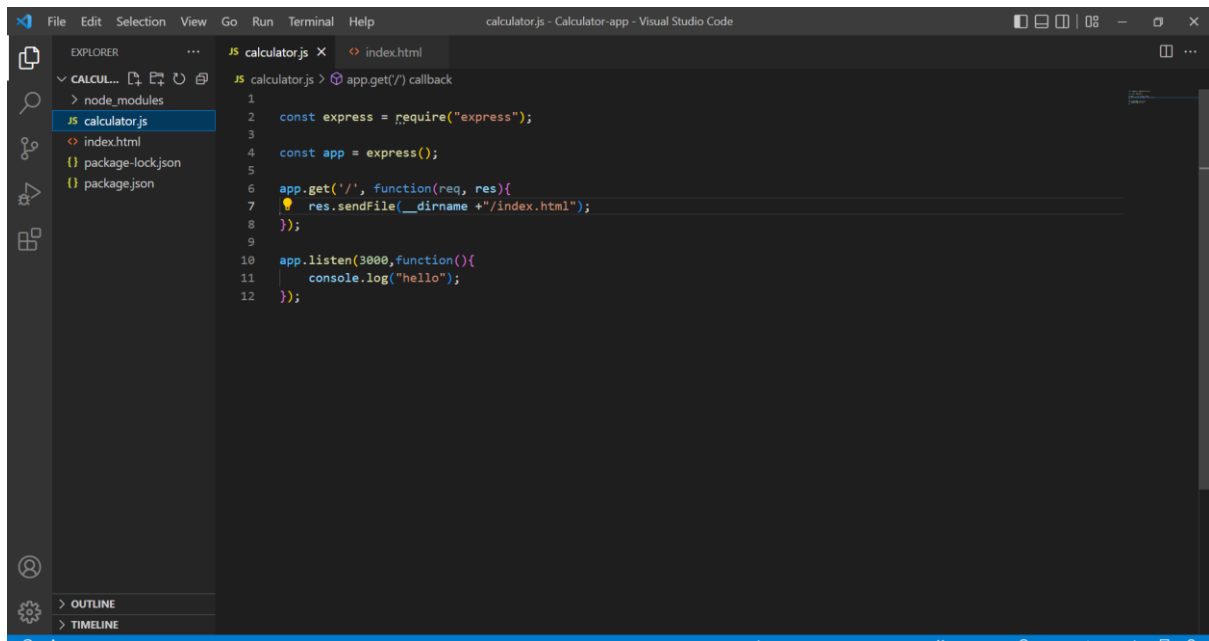
C:\Users\hp\Desktop\About_Node_using_ExpressJS\Calculator-app>nodemon calculator.js
[nodemon] 2.0.19
[nodemon] to restart at any time, enter `rs`
[nodemon] watching path(s): *.*
[nodemon] watching extensions: js,mjs,json
[nodemon] starting `node calculator.js`
```

```
localhost:3000 x +
localhost:3000
hello
```

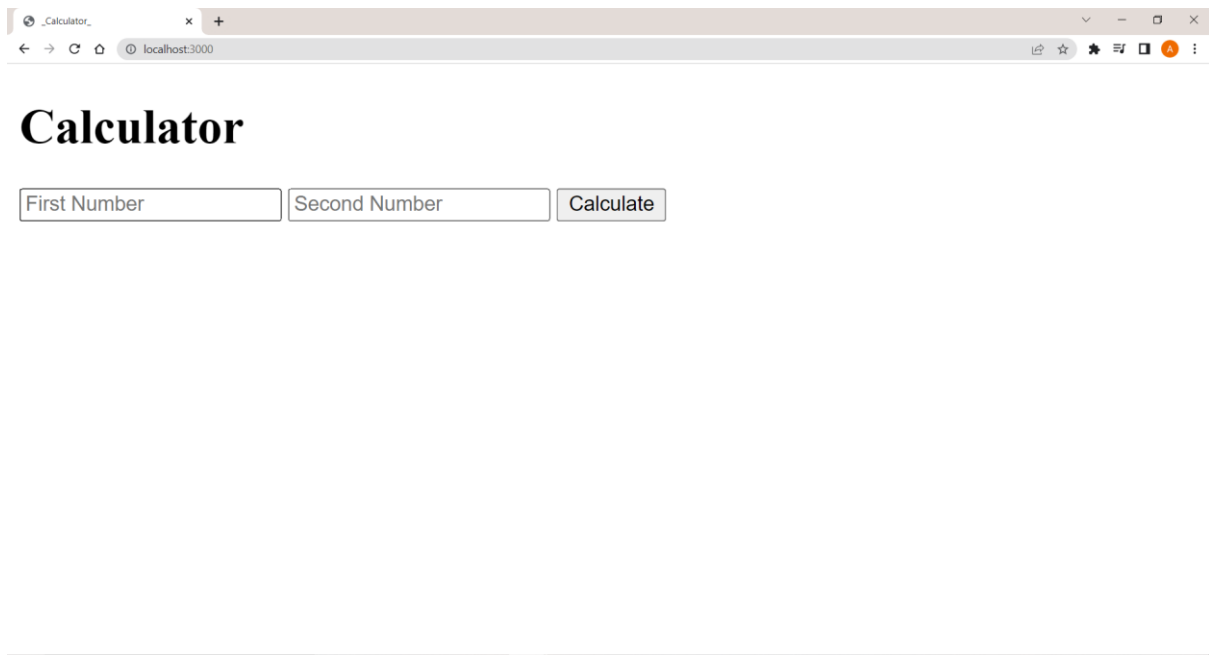
Step 2: - Building the HTML File and Linking it



```
1 <!DOCTYPE html>
2 <!--[if lt IE 7]> <html class="no-js lt-ie9 lt-ie8 lt-ie7"> <![endif]-->
3 <!--[if IE 7]> <html class="no-js lt-ie9 lt-ie8"> <![endif]-->
4 <!--[if IE 8]> <html class="no-js lt-ie9"> <![endif]-->
5 <!--[if gt IE 8]> <html class="no-js"> <![endif]-->
6 <html>
7 <head>
8 <meta charset="utf-8">
9 <meta http-equiv="X-UA-Compatible" content="IE=edge">
10 <title>Calculator</title>
11 <meta name="description" content="">
12 <meta name="viewport" content="width=device-width, initial-scale=1">
13 </head>
14 <body>
15
16 <form action="index.html" method="post">
17 <input type="text" name="num1" placeholder="First Number">
18 <input type="text" name="num2" placeholder="Second Number">
19
20 <button type="submit" name="submit">Calculate</button>
21 </form>
22
23 </body>
24 </html>
```



```
1
2 const express = require("express");
3
4 const app = express();
5
6 app.get('/', function(req, res){
7   res.sendFile(__dirname + "/index.html");
8 });
9
10 app.listen(3000, function(){
11   console.log("hello");
12 });
```



Step 3: - Using post and body parser to Calculate the sum of the given inputs.

```
C:\Windows\system32\cmd.exe

TypeError: console.log is not a function
    at Server.<anonymous> (C:\Users\hp\Desktop\About_Node_using_ExpressJS\Calculator-app\calculator.js:11:13)
    at Object.onceWrapper (node:events:645:28)
    at Server.emit (node:events:526:28)
    at emitListeningNT (node:net:1364:10)
    at processTicksAndRejections (node:internal/process/task_queues:82:21)
[nodemon] app crashed - waiting for file changes before starting...
[nodemon] restarting due to changes...
[nodemon] starting 'node calculator.js'
hello
[nodemon] restarting due to changes...
[nodemon] starting 'node calculator.js'
hello
[nodemon] restarting due to changes...
[nodemon] starting 'node calculator.js'
hello
Error: ENOENT: no such file or directory, stat 'C:\Users\hp\Desktop\About_Node_using_ExpressJS\Calculator-app\index.html'
[nodemon] restarting due to changes...
[nodemon] starting 'node calculator.js'
hello
^C
C:\Users\hp\Desktop\About_Node_using_ExpressJS\Calculator-app>
C:\Users\hp\Desktop\About_Node_using_ExpressJS\Calculator-app>npm install body-parser

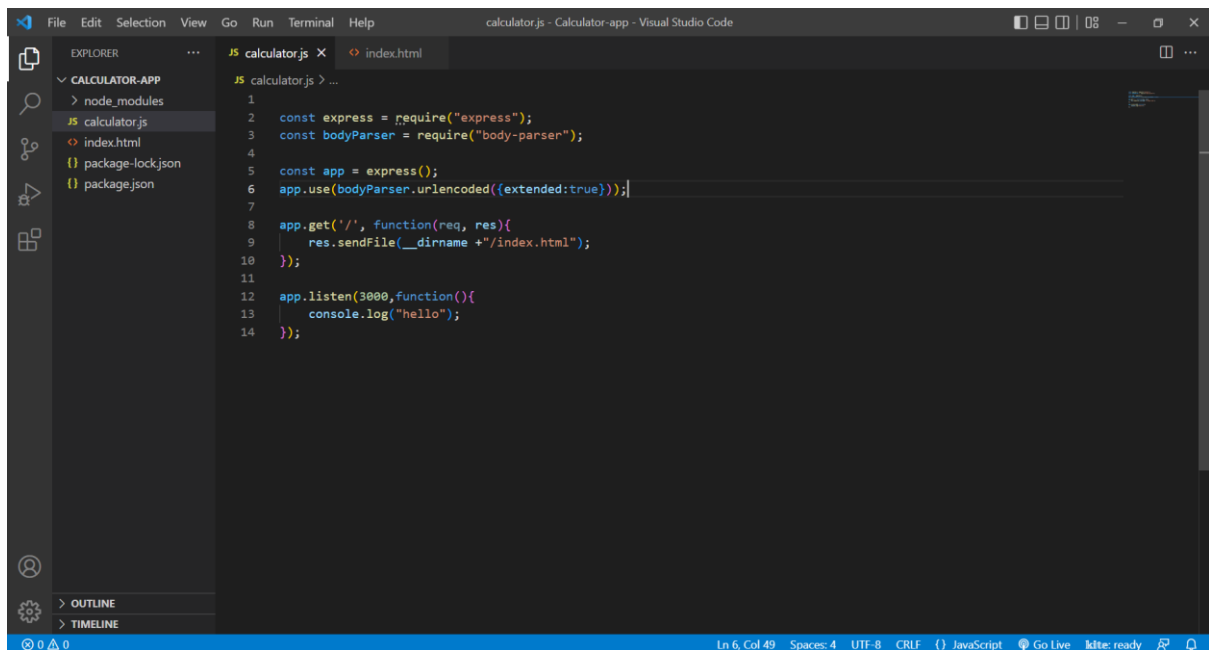
up to date, audited 58 packages in 1s

7 packages are looking for funding
  run `npm fund` for details

found 0 vulnerabilities

C:\Users\hp\Desktop\About_Node_using_ExpressJS\Calculator-app>
```

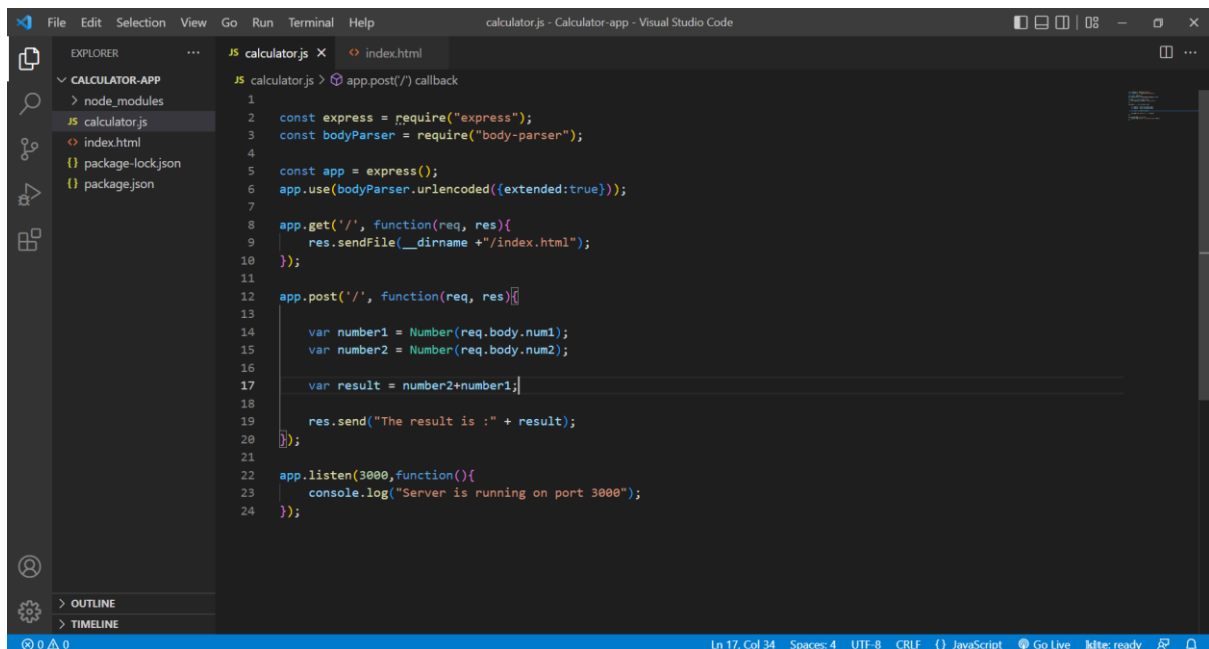
Basic code to be written whenever you use bodyParser.



The screenshot shows the Visual Studio Code editor with a project named 'calculator-app'. The Explorer sidebar on the left shows the file structure: 'calculator.js', 'index.html', 'package-lock.json', and 'package.json'. The main editor window displays the 'calculator.js' file with the following code:

```
1
2 const express = require("express");
3 const bodyParser = require("body-parser");
4
5 const app = express();
6 app.use(bodyParser.urlencoded({extended:true}));
7
8 app.get('/', function(req, res){
9   res.sendFile(__dirname + "/index.html");
10 });
11
12 app.listen(3000,function(){
13   console.log("hello");
14 });
```

The status bar at the bottom indicates the cursor is at line 6, column 49, in a UTF-8 file with CRLF line endings, using JavaScript syntax.



The screenshot shows the same Visual Studio Code editor, but now with an additional code block added to 'calculator.js'. The Explorer sidebar remains the same. The main editor window shows the updated code:

```
1
2 const express = require("express");
3 const bodyParser = require("body-parser");
4
5 const app = express();
6 app.use(bodyParser.urlencoded({extended:true}));
7
8 app.get('/', function(req, res){
9   res.sendFile(__dirname + "/index.html");
10 });
11
12 app.post('/', function(req, res){
13   var number1 = Number(req.body.num1);
14   var number2 = Number(req.body.num2);
15   var result = number2+number1;
16
17   res.send("The result is : " + result);
18 });
19
20
21
22 app.listen(3000,function(){
23   console.log("Server is running on port 3000");
24 });
```

The status bar at the bottom indicates the cursor is at line 17, column 34, in a UTF-8 file with CRLF line endings, using JavaScript syntax.



The result is :5
