

Debugging node js scripts in Visual Studio Code

Part A - Installation of Node JS

1- Please install nodejs from <https://nodejs.org/en/download/>
(choose LTS version)

2- restart computer so that env path variable gets updated

3- at command prompt type
command prompt> node -v
v8.11.3 // confirms successful installation of nodeJS basics

4- create a folder (e.g c:\nodeJStest) and create this app.js file and copy it there
command prompt>cd "c:\nodeJStest"

app.js:

```
let http = require('http');
http.createServer(function (request, response) {

    response.writeHead(200, {'Content-type': 'text/plain'});
    response.write("Response's coming from server ... \n");
    response.end();

}).listen(8080);
console.log('listening ...');
```

5- run the app by
command prompt> node app.js

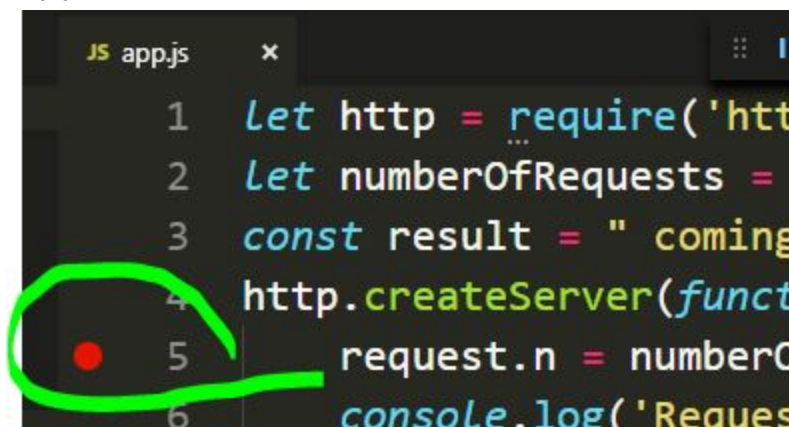
6- on the browser enter http://localhost:8080
If everything ok, it will print down the message
"

Response's coming from server ..."

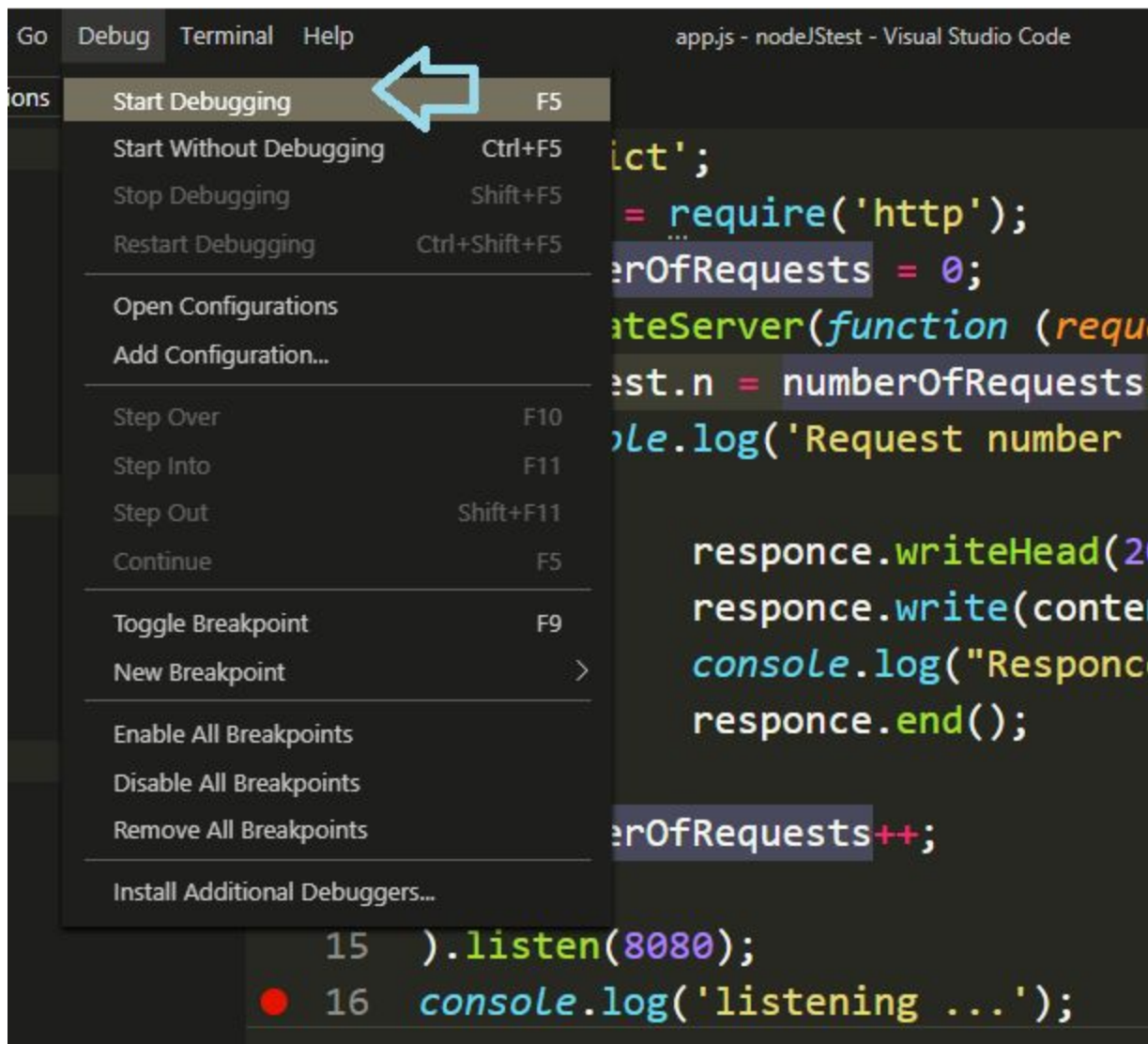
Part B: Debugging of Node JS in Visual studio Code

Assuming Visual Studio Code is already installed in your machine, follow the instructions below to test the internal debugger at VSC (visual Studio Code)

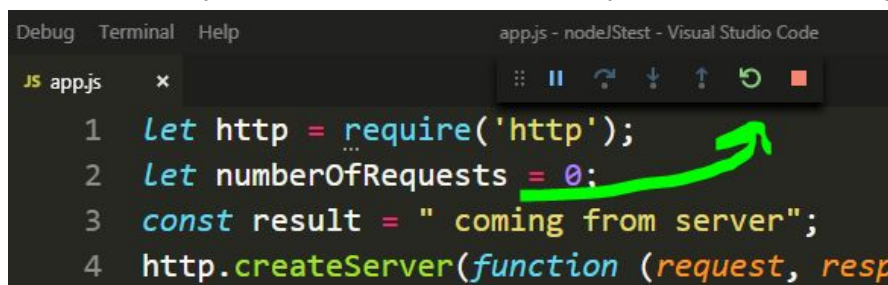
- 1- at the command prompt where you ran the app.js, press ctrl+c to terminate the app.
- 2- Now go to visual studio code > file>open folder" and open your folder (e.g. c:\nodeJStest)
- 3- open app.js
- 4- place a breakpoint anywhere in your code by clicking on the left hand side gutter. Just like the way you would set breakpoints in chrome development tool



- 5- this time instead of running your app from command line, simply run it inside Visual Studio code by going to menu Debug>Start Debugging



6- At the top in your Visual Studio Code editor you will see the debugging control panel buttons:



at the bottom you will see the debug console with a message like :
Debugger listening ..

```
14     numberOfRequests
15 }
16 ).listen(8080);
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

C:\Program Files\nodejs\node.exe --inspect
Debugger listening on ws://127.0.0.1:15959

7- Now your server side program is running and waiting for the client to send a request to server

8- Now you can use browser to send a request to server. Remember that for your application you have selected port number 8080 (e.i. `.listen(8080)`). You can pick other available port numbers

9-Now on the browser enter <http://localhost:8080>

Go Debug Terminal Help app.js - node/Jstest - Visual Studio Code

```
1 let http = require('http');
2 let numberOfRequests = 0;
3 const result = " coming from server";
4 http.createServer(function (request, response) {
5     request.n = numberOfRequests;
6     console.log('Request number ' + numberOfRequests);
7 }
```

And the breakpoint will hit. Hover your mouse on variables and see their values