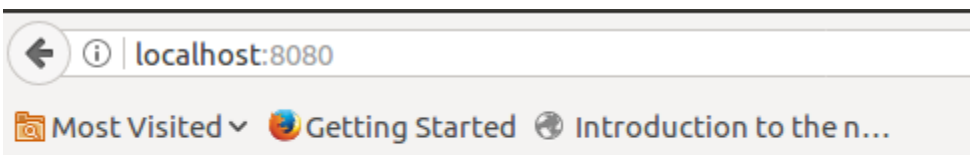


# Node.js Exercise 1

1. Create a custom module which returns the sum and average of any two numbers passed into it. Require the module and run the server by passing 123 and 321 so that the server prints out the sum and average.

```
1 var http = require('http');
2 var dt = require('./myfird');
3
4 http.createServer(function (req, res) {
5     res.writeHead(200, {'Content-Type': 'text/html'});
6     res.write("Total: " + dt.sum(123,321));
7     res.end();
8 }).listen(8080);
9
```



Total: 444

```
1 var http = require('http');
2 var dt = require('./myfird');
3
4 http.createServer(function (req, res) {
5     res.writeHead(200, {'Content-Type': 'text/html'});
6     res.write("Average: " + dt.ave(123,321));
7     res.end();
8 }).listen(8080);
9
```

```
1 exports.ave = function (x,y) {  
2   return ((x+y)/2);  
3 };  
4 |
```

← ⓘ | localhost:8080

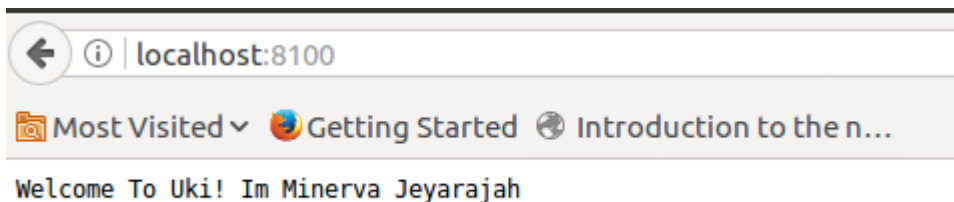
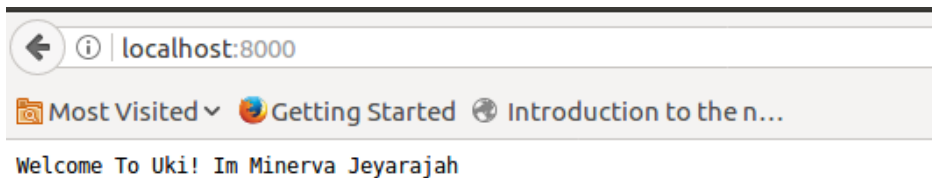
📁 Most Visited ▾ 🦊 Getting Started 🌐 Introduction to the n...

Average: 222

**2. Create a simple http server and print “Welcome to Uki. I am yourname ” when a request is sent to your server via the port 8000. (Note - Change different port numbers and check)**

```
1 var http = require('http');
2
3 http.createServer(function (req, res) {
4     res.writeHead(200, {'Content-Type': 'text/plain'});
5     res.end('Welcome To Uki! Im Minerva Jeyarajah');
6 }).listen(8000);
7
```

```
at HTTPParser.parserOnHeaderComplete (_http_common.js:99:23),
ukistu14@ukipc14:~/Documents/UkiExcercises/NodeJS$ node qu2.js
```



### 3. Using the file system module create a new file called ukinode.txt

#### 3.1 Write a paragraph about Uki into that file

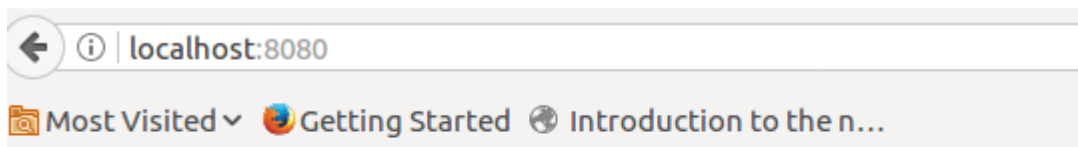
```
1
2 var fs = require('fs');
3 fs.writeFile('ukinode.txt', 'Uki.life is for studying Coding Programs', function (err, file) {
4   if (err) throw err;
5   console.log('Saved!');
6 });
7
```

```
ukistu14@ukipc14:~/Documents/UkiExcercises/NodeJS$ node qu3.js
Saved!
ukistu14@ukipc14:~/Documents/UkiExcercises/NodeJS$
```

#### 3.2 Serve that file to the client (Read File) over your server

```
1 var http = require('http');
2 var fs = require('fs');
3 http.createServer(function (req, res) {
4   fs.readFile('ukinode.txt', function(err, data) {
5     res.writeHead(200, {'Content-Type': 'text/html'});
6     res.write(data);
7     res.end();
8   });
9 }).listen(8080);
10
```

```
ukistu14@ukipc14:~/Documents/UkiExcercises/NodeJS$ node qu3.2.js
```



Uki.life is for studying Coding Programs

### 3.3 Append another paragraph about Uki and now serve the new file

```
ukistu14@ukipc14:~/Documents/UkiExcersices/NodeJS$ node qu3.3.js
Saved!
ukistu14@ukipc14:~/Documents/UkiExcersices/NodeJS$
```

```
1 var fs = require('fs');
2
3 fs.appendFile('ukinode.txt', 'In Uki There are 15 students. Our lecturers are Vithu /
4   if (err) throw err;
5   console.log('Saved!');
6 });
7
```

### 3.4 Rename the file as ukinodejsexercise1.txt

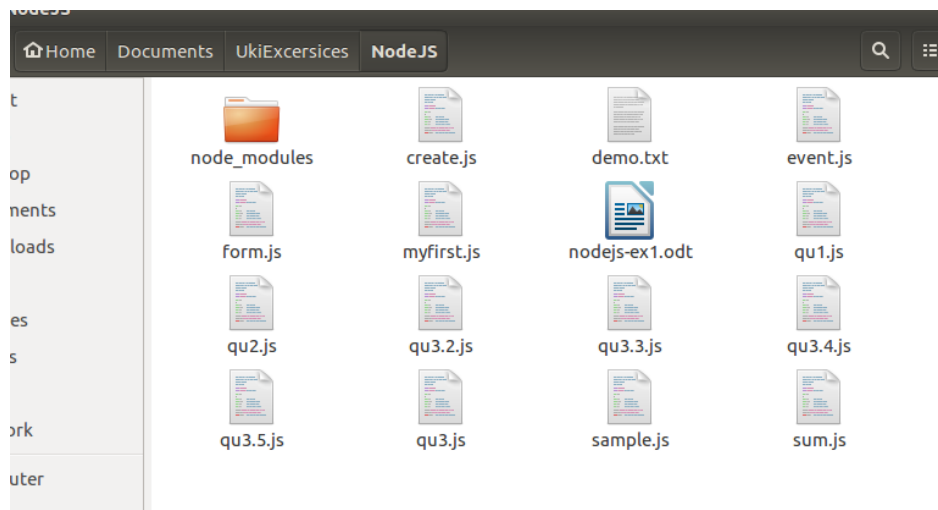
```
1 var fs = require('fs');
2
3 fs.rename('ukinode.txt', 'ukinodejsexcersice.txt', function (err) {
4   if (err) throw err;
5   console.log('File Renamed!');
6 });
```

```
ukistu14@ukipc14:~/Documents/UkiExcersices/NodeJS$ node qu3.4.js
File Renamed!
ukistu14@ukipc14:~/Documents/UkiExcersices/NodeJS$
```

### 3.5 Delete the file you created

```
1 var fs = require('fs');
2
3 fs.unlink('ukinodejsexcersice.txt', function (err) {
4   if (err) throw err;
5   console.log('File deleted!');
6 });
7
```

```
ukistu14@uklpc14:~/Documents/UkiExcersices/NodeJS$ node qu3.5.js
File deleted!
ukistu14@uklpc14:~/Documents/UkiExcersices/NodeJS$
```



4. Create two html files called head.html which is a web page which says 'you have got head' and tail.html which is a web page which says 'you have got tail' and save them in the same folder as your node.js files.

Create a Node.js file that opens the requested file and returns the content to the client. If anything goes wrong, throw a 404 error.

If you have followed the correct steps you should see two different results when opening these two addresses:

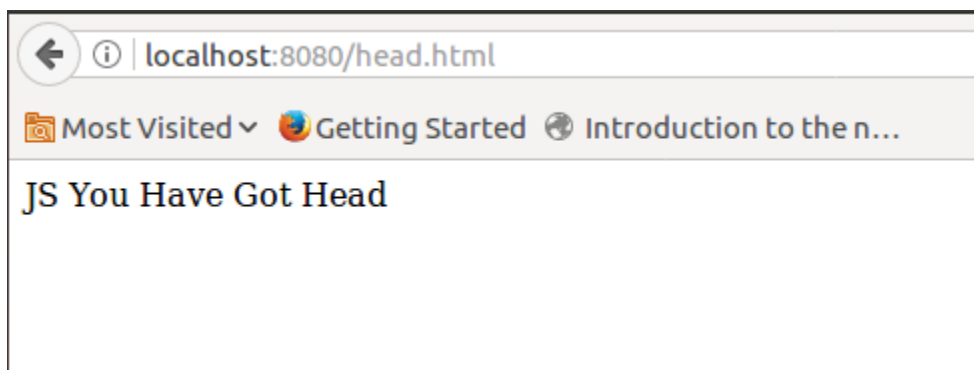
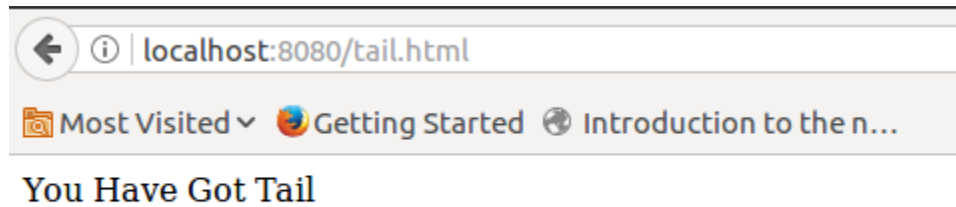
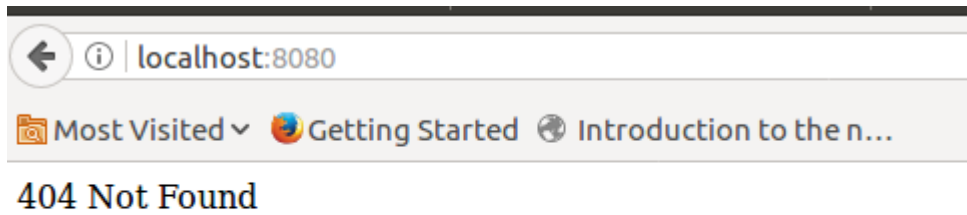
http://localhost:8080/head.html -> You have got head

http://localhost:8080/tail.html -> You have got tail

```
var http = require('http');
var url = require('url');
var fs = require('fs');

http.createServer(function (req, res) {
  var q = url.parse(req.url, true);
  var filename = "." + q.pathname;
  fs.readFile(filename, function(err, data) {
    if (err) {
      res.writeHead(404, {'Content-Type': 'text/html'});
      return res.end("404 Not Found");
    }
    res.writeHead(200, {'Content-Type': 'text/html'});
    res.write(data);
    return res.end();
  });
}).listen(8080);
```

```
File deleted.
ukistu14@ukipc14:~/Documents/UkiExcercises/NodeJS$ node qu4.js
```

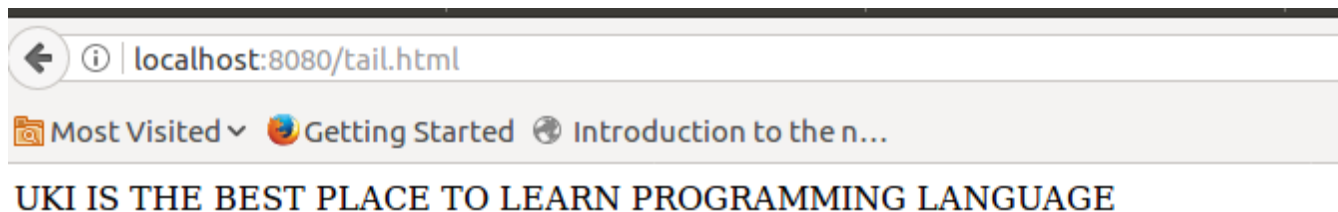




5. Install the package “upper-case” using NPM and create a Node.js file that will convert the output "Uki is the best place to learn programming !" into upper-case letters.

```
npm WARN enoent ENOENT: no such file or directory, open '/home/ukistu14/Documents/UkiExcercises/NodeJS/package.json'
npm WARN NodeJS No description
npm WARN NodeJS No repository field.
npm WARN NodeJS No README data
npm WARN NodeJS No license field.
ukistu14@ukipc14:~/Documents/UkiExcercises/NodeJS$
```

```
1 var http = require('http');
2 var uc = require('upper-case');
3
4 http.createServer(function (req, res) {
5     res.writeHead(200, {'Content-Type': 'text/html'});
6     res.write(uc('Uki is the best place to learn programming language'));
7     res.end();
8 }).listen(8080);
9
```



6. Create an event handler function that will say “I bark when I see strangers !” when a "bark" event is fired.

```
1  var events = require('events');
2  var EventEmitter = new events.EventEmitter();
3
4  //Create an event handler:
5  var myEventHandler = function () {
6      console.log('“I bark when I see strangers !”');
7  }
8
9  //Assign the eventhandler to an event:
10  EventEmitter.on('bark', myEventHandler);
11
12  //Fire the 'scream' event:
13  EventEmitter.emit('bark');
14
```

```
ukistu14@ukipc14:~/Documents/UkiExcercises/NodeJS$ node qu6.js
“I bark when I see strangers !”
ukistu14@ukipc14:~/Documents/UkiExcercises/NodeJS$
```

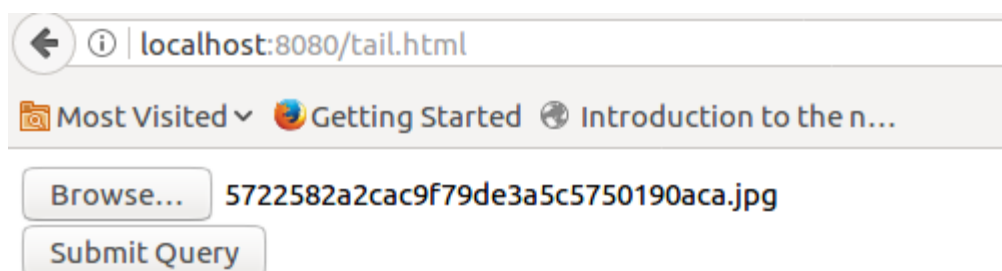
## 7. Install “formidable” module using npm and make a web page in Node.js that lets the user upload files to your computer.

```
ukistu14@ukipc14:~/Documents/UkiExcercises/NodeJS$ npm install formidable
/home/ukistu14/Documents/UkiExcercises/NodeJS
└─ formidable@1.1.1

npm WARN enoent ENOENT: no such file or directory, open '/home/ukistu14/Documents/UkiExcercises/NodeJS/package.json'
npm WARN NodeJS No description
npm WARN NodeJS No repository field.
npm WARN NodeJS No README data
npm WARN NodeJS No license field.
ukistu14@ukipc14:~/Documents/UkiExcercises/NodeJS$
```

### 7.1 Save that uploaded file into your Documents directory.

```
1  var http = require('http');
2
3  http.createServer(function (req, res) {
4    res.writeHead(200, {'Content-Type': 'text/html'});
5    res.write('<form action="fileupload" method="post" enctype="multipart/form-data">');
6    res.write('<input type="file" name="filetoupload"><br>');
7    res.write('<input type="submit">');
8    res.write('</form>');
9    return res.end();
10 }).listen(8080);
11
```



**8. Using the Nodemailer module create a server and send a mail to info@uki.life with the subject : “Testing my nodemailer module” , text: “This is easy !”**  
**8.1 Now instead of text send a basic html formatted mail.**

```
1  var nodemailer = require('nodemailer');
2
3  var transporter = nodemailer.createTransport({
4    service: 'gmail',
5    auth: {
6      user: 'Minerva Jeyarajah',
7      pass: 'XXXXXXXXX'
8    }
9  });
10
11 var mailOptions = {
12   from: 'maryannminerva@gmail.com',
13   to: 'info@uki.life',
14   subject: 'Testing my nodemailer module',
15   text: 'That is easy!'
16 };
17
18 transporter.sendMail(mailOptions, function(error, info){
19   if (error) {
20     console.log(error);
21   } else {
22     console.log('Email sent: ' + info.response);
23   }
24 });
25
```

```
uklstu14@uklpc14:~/Documents/UkiExcercises/NodeJS$ node qu8.js
{ Error: connect ENETUNREACH 2404:6800:4003:c01::6c:465
  at Object.exports._errnoException (util.js:1018:11)
  at exports._exceptionWithHostPort (util.js:1041:20)
  at TCPConnectWrap.afterConnect [as oncomplete] (net.js:1086:14)
  code: 'ECONNECTION',
  errno: 'ENETUNREACH',
  syscall: 'connect',
  address: '2404:6800:4003:c01::6c',
  port: 465,
  command: 'CONN' }
```

