

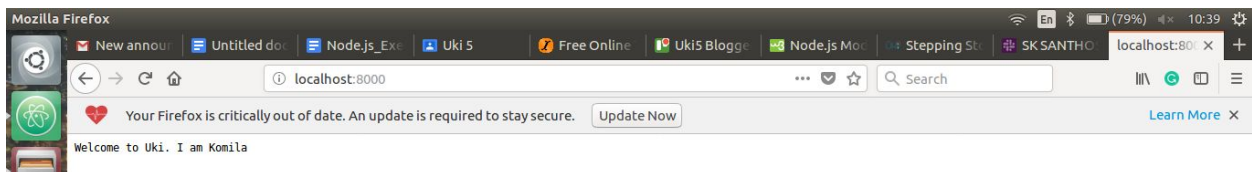
Node.js Exercise 1

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.

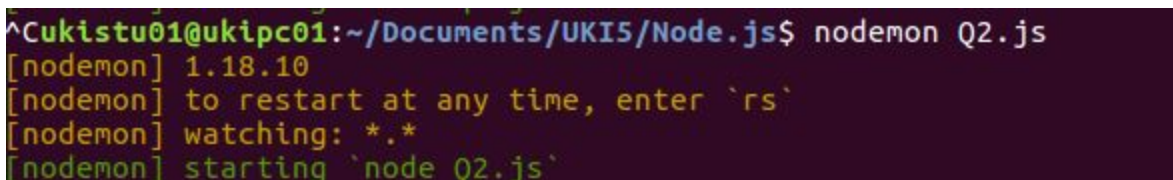


```
sum : 444
avg : 222
```

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)

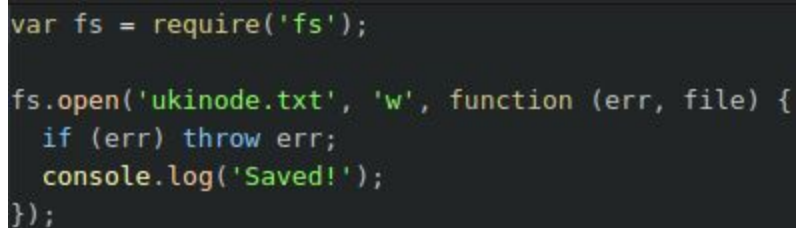


```
localhost:8000
Welcome to Uki. I am Komila
```



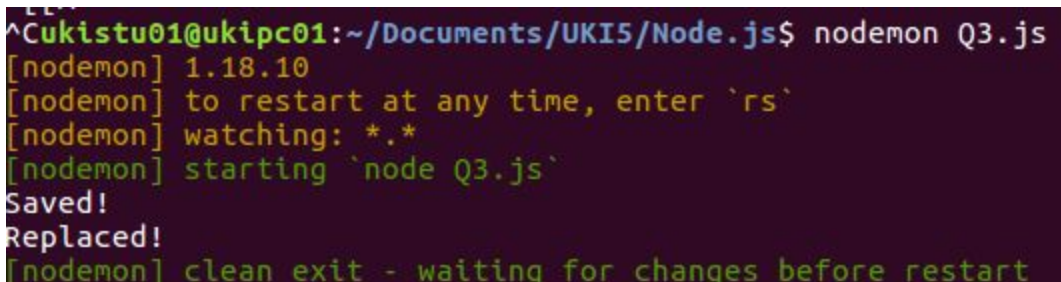
```
^Cukistu01@ukipc01:~/Documents/UKI5/Node.js$ nodemon Q2.js
[nodemon] 1.18.10
[nodemon] to restart at any time, enter `rs`
[nodemon] watching: *.*
[nodemon] starting `node Q2.js`
```

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



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

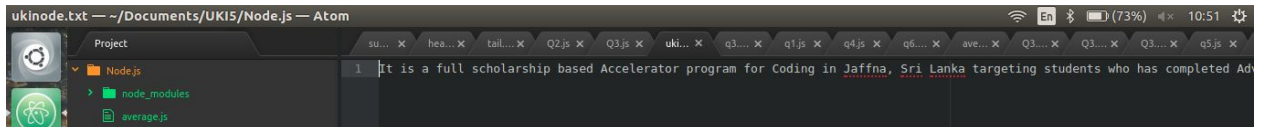
fs.open('ukinode.txt', 'w', function (err, file) {
  if (err) throw err;
  console.log('Saved!');
});
```



```
^Cukistu01@ukipc01:~/Documents/UKI5/Node.js$ nodemon Q3.js
[nodemon] 1.18.10
[nodemon] to restart at any time, enter `rs`
[nodemon] watching: *.*
[nodemon] starting `node Q3.js`
Saved!
Replaced!
[nodemon] clean exit - waiting for changes before restart
```

3.1 Write a paragraph about Uki into that file

```
fs.writeFile('ukinode.txt', 'It is a full scholarship based Accelerator program for Coding in Jaffna, Sri Lanka targeting  
if (err) throw err;  
console.log('Replaced!');  
});
```

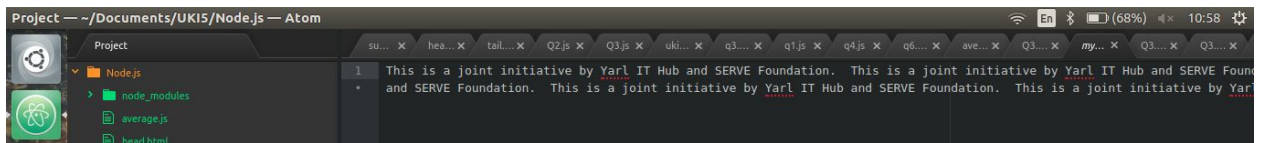


3.2 Serve that file to the client (Read File) over your server



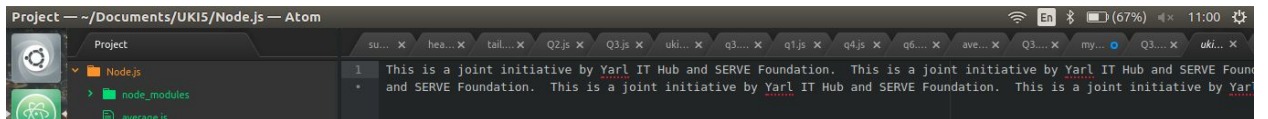
3.3 Append another paragraph about Uki and now serve the new file

```
^Cukistu01@ukipc01:~/Documents/UKI5/Node.js$ nodemon Q3.3.1.js  
[nodemon] 1.18.10  
[nodemon] to restart at any time, enter `rs`  
[nodemon] watching: *.*  
[nodemon] starting `node Q3.3.1.js`  
Updated!  
[nodemon] clean exit - waiting for changes before restart
```



3.4 Rename the file as ukinodejsexercise1.txt

```
^Cukistu01@ukipc01:~/Documents/UKI5/Node.js$ nodemon Q3.4.js  
[nodemon] 1.18.10  
[nodemon] to restart at any time, enter `rs`  
[nodemon] watching: *.*  
[nodemon] starting `node Q3.4.js`  
File Renamed!  
[nodemon] clean exit - waiting for changes before restart
```



3.5 Delete the file you created

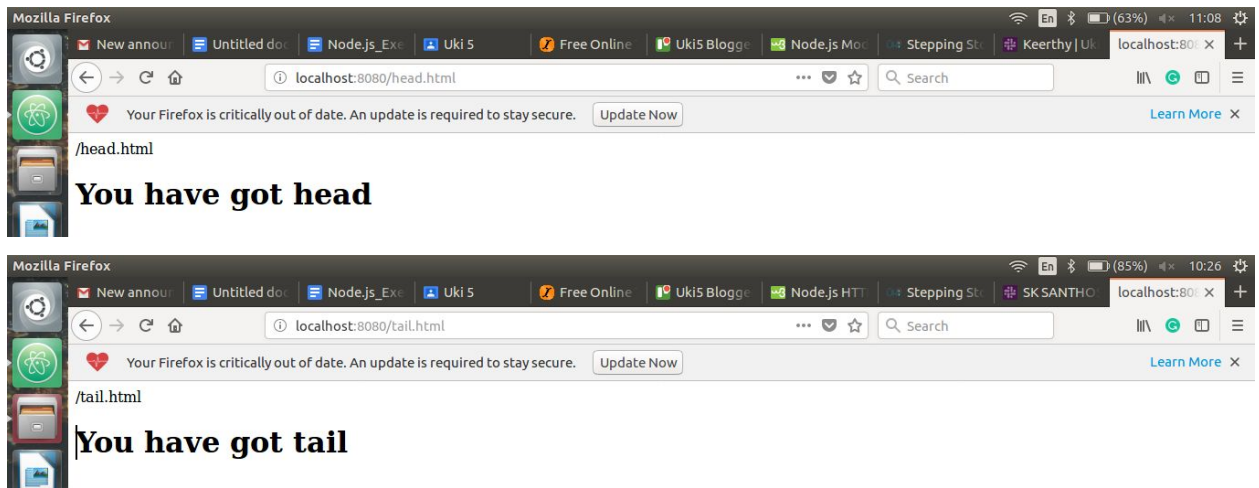
```
^Cukistu01@ukipc01:~/Documents/UKI5/Node.js$ nodemon Q3.5.js
[nodemon] 1.18.10
[nodemon] to restart at any time, enter `rs`
[nodemon] watching: *.*
[nodemon] starting `node Q3.5.js`
File deleted!
[nodemon] clean exit - waiting for changes before restart
```

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.

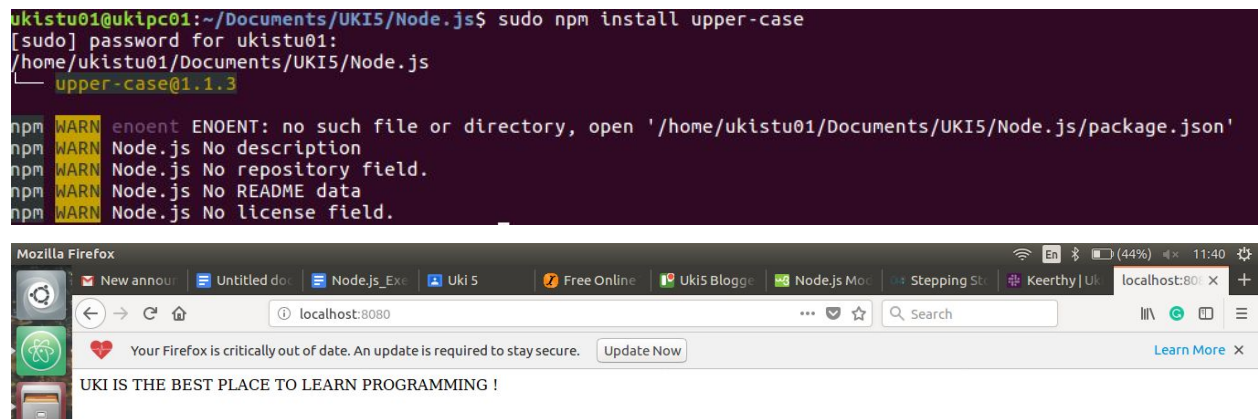
If you have followed the correct steps you should see two different results when opening these two addresses:

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

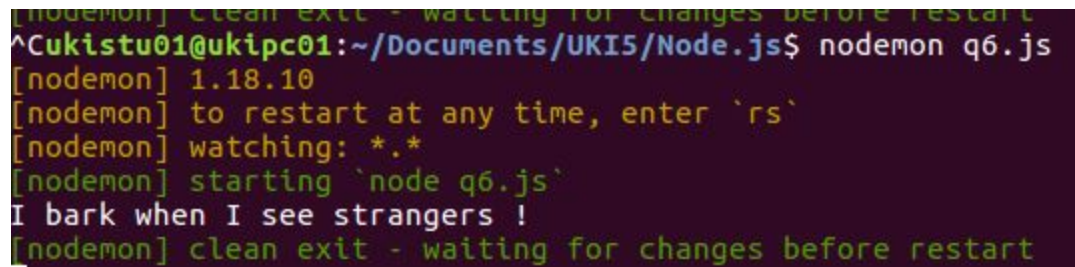
`http://localhost:8080/tail.html` -> You have got tail



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.

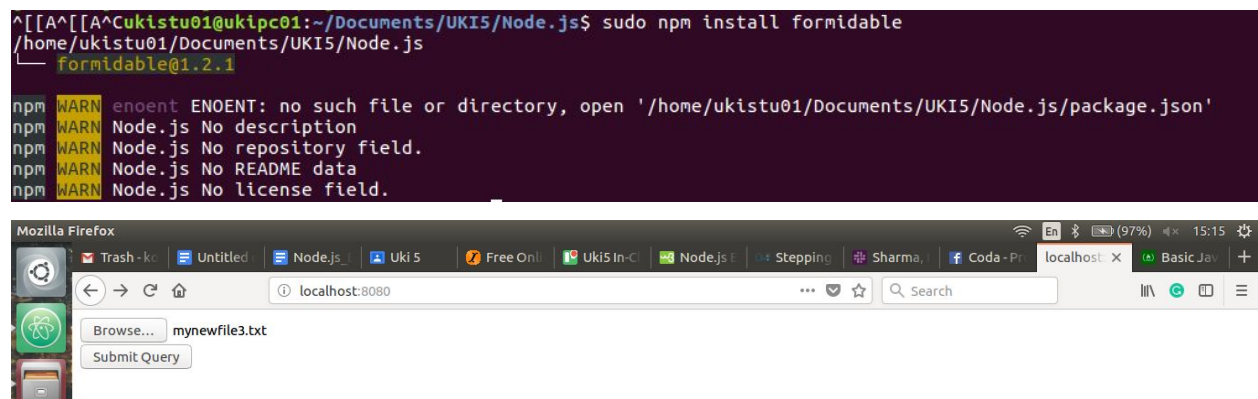


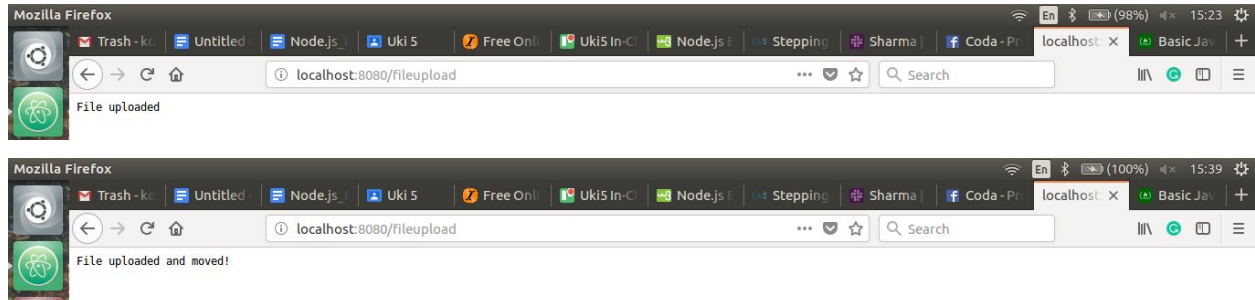
6. Create an event handler function that will say "I bark when I see strangers !" when a "bark" event is fired.



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

7.1 Save that uploaded file into your Documents directory.





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.

```
^Cukistu01@ukipc01:~/Documents/UKI5/Node.js$ sudo npm install nodemailer
/home/ukistu01/Documents/UKI5/Node.js
└─ nodemailer@6.2.1

npm WARN enoent ENOENT: no such file or directory, open '/home/ukistu01/Documents/UKI5/Node.js/package.json'
npm WARN Node.js No description
npm WARN Node.js No repository field.
npm WARN Node.js No README data
npm WARN Node.js No license field.
```

```
var nodemailer = require('nodemailer');

var transporter = nodemailer.createTransport({
  service: 'gmail',
  auth: {
    user: 'komikrish02@gmail.com',
    pass: 'bbnnc34f5'
  }
});

var mailOptions = {
  from: 'komikrish02@gmail.com',
  to: 'info@uki.life',
  subject: 'Testing my nodemailer module',
  text: 'This is easy !'
};

transporter.sendMail(mailOptions, function(error, info){
  if (error) {
    console.log(error);
  } else {
    console.log('Email sent: ' + info.response);
  }
});
```

```
var nodemailer = require('nodemailer');

var transporter = nodemailer.createTransport({
  service: 'gmail',
  auth: {
    user: 'komikrish02@gmail.com',
    pass: 'bbnnc34f5'
  }
});

var mailOptions = {
  from: 'komikrish02@gmail.com',
  to: 'info@uki.life',
  subject: 'Testing my nodemailer module',
  html: '<h1>Welcome</h1><p>That was easy!</p>'
};

transporter.sendMail(mailOptions, function(error, info){
  if (error) {
    console.log(error);
  } else {
    console.log('Email sent: ' + info.response);
  }
});
```