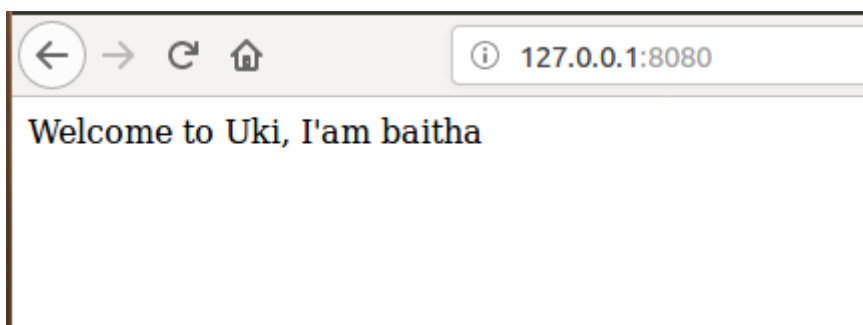


Node.js Exercise 1

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.
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/html'});
5   res.write( "Welcome to Uki, I'am baitha");
6   res.end();
7 }).listen(8080);
8
```

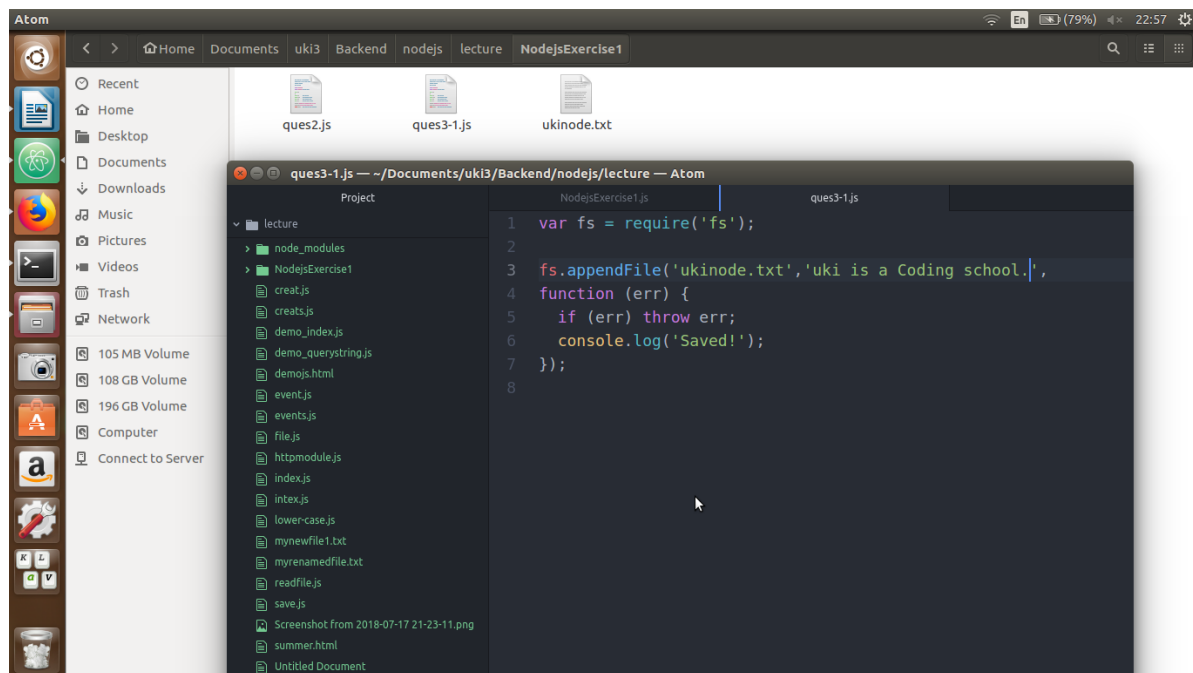
```
ukistu14@ukipc14:~/Documents/uki3/Backend/nodejs/lecture/NodejsExercise1$ node ques2.js
```



3. Using the file system module create a new file called ukinode.txt
- 3.1 Write a paragraph about Uki into that file

```
1 var fs = require('fs');
2
3 fs.appendFile('ukinode.txt','uki is a Coding school.',
4 function (err) {
5   if (err) throw err;
6   console.log('Saved!');
7 });
8
```

```
ukistu14@ukipc14:~/Documents/uki3/Backend/nodejs/lecture/NodejsExercise1$ node ques3-1.js
Saved!
```



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

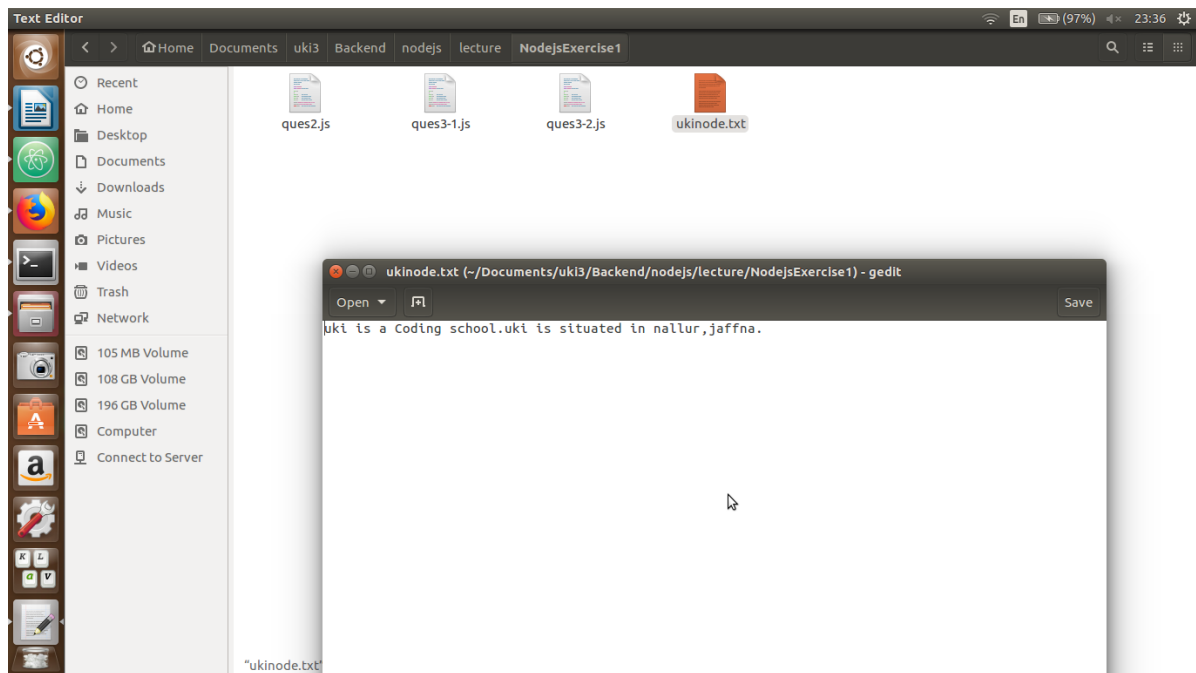
```
1 var http = require('http');
2 var fs = require('fs')
3
4 http.createServer(function (req, res) {
5   fs.readFile('ukinode.txt', function(err,data){
6     res.writeHead(200, {'Content-Type': 'text/html'});
7     res.write( "Welcome to Uki, I'am baitha ");
8     res.write(data);
9     res.end();
10  });
11 }).listen(8080);
12
```



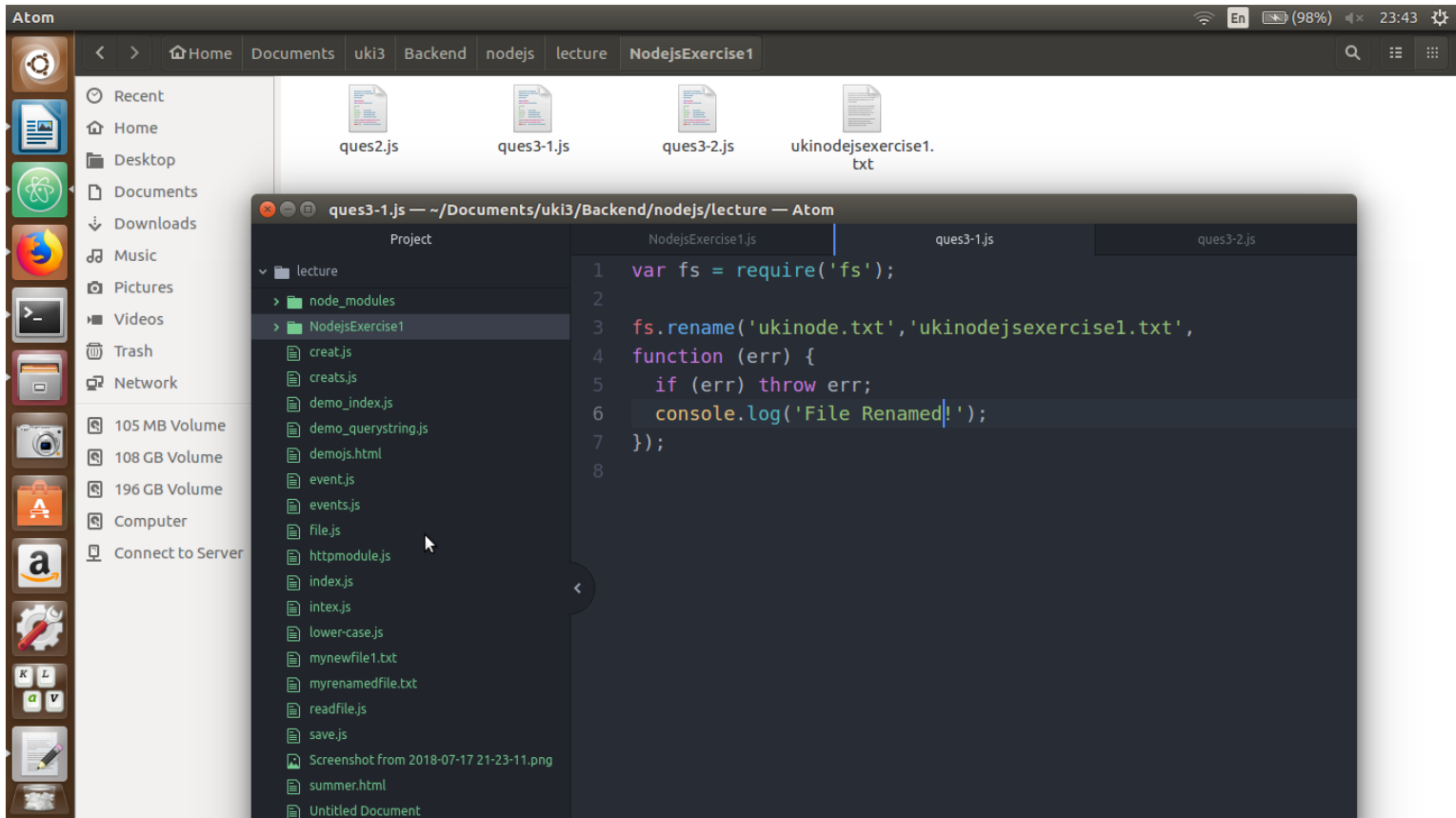
Welcome to Uki, I'am baitha uki is a Coding school.

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

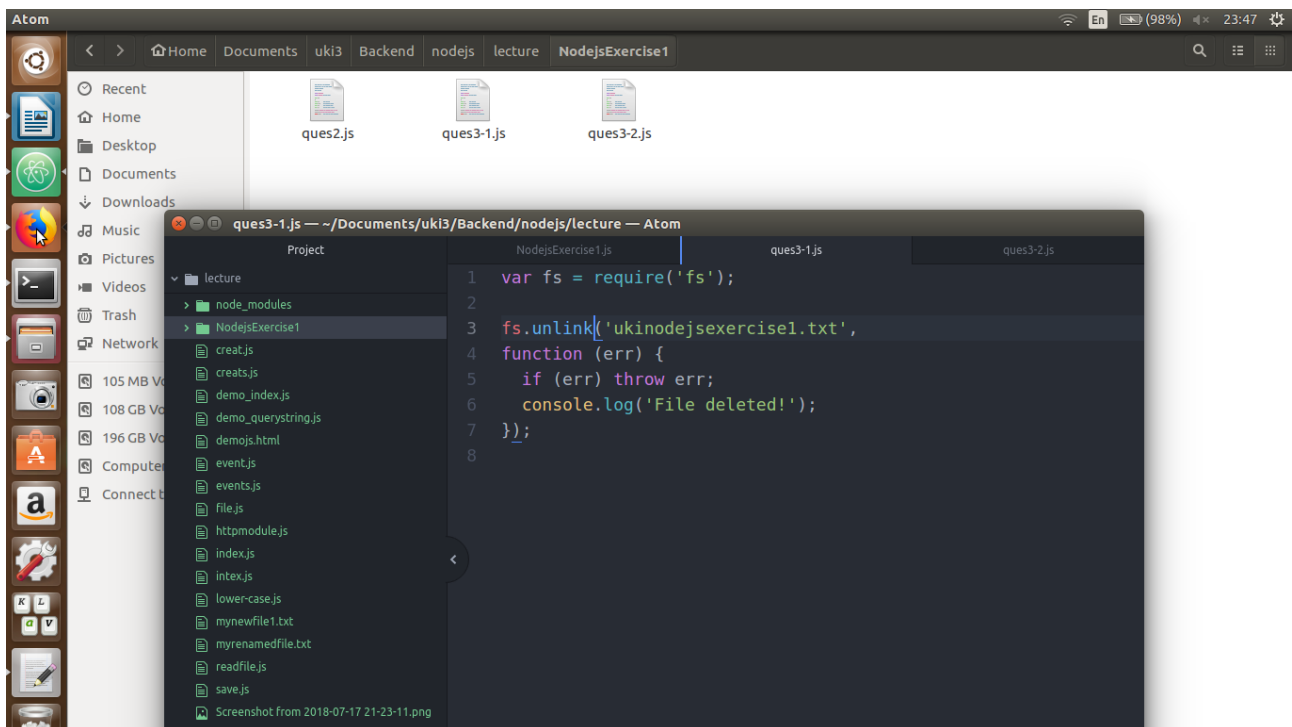
```
1 fs = require('fs');
2
3 appendFile('ukinode.txt','uki is situated in nallur,jaffna.',
4 ction (err) {
5 f (err) throw err;
6 onsole.log('Saved!');
7
8
```



3.4 Rename the file as ukinodejsexercise1.txt



3.5 Delete the file you created



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

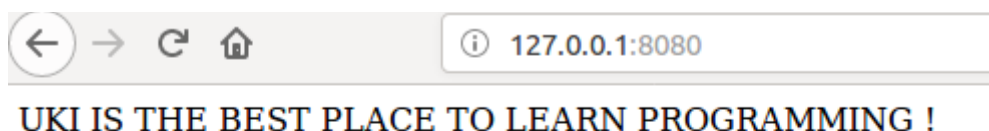
http://localhost:8080/tail.html -> You have got tail

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.

```
ukistu14@ukipc14:~/Documents/uki3/Backend/nodejs/lecture/NodejsExercise1$ npm install upper-case --save
npm WARN saveError ENOENT: no such file or directory, open '/home/ukistu14/Documents/uki3/Backend/nodejs/lecture/package.json'
/home/ukistu14/Documents/uki3/Backend/nodejs/lecture
└─ upper-case@1.1.3

npm WARN enoent ENOENT: no such file or directory, open '/home/ukistu14/Documents/uki3/Backend/nodejs/lecture/package.json'
npm WARN enoent ENOENT: no such file or directory, open '/home/ukistu14/Documents/uki3/Backend/nodejs/lecture/node_modules/expr/package.json'
npm WARN lecture No description field.
npm WARN lecture No repository field.
npm WARN lecture No README data
npm WARN lecture No license field.
ukistu14@ukipc14:~/Documents/uki3/Backend/nodejs/lecture/NodejsExercise1$
```

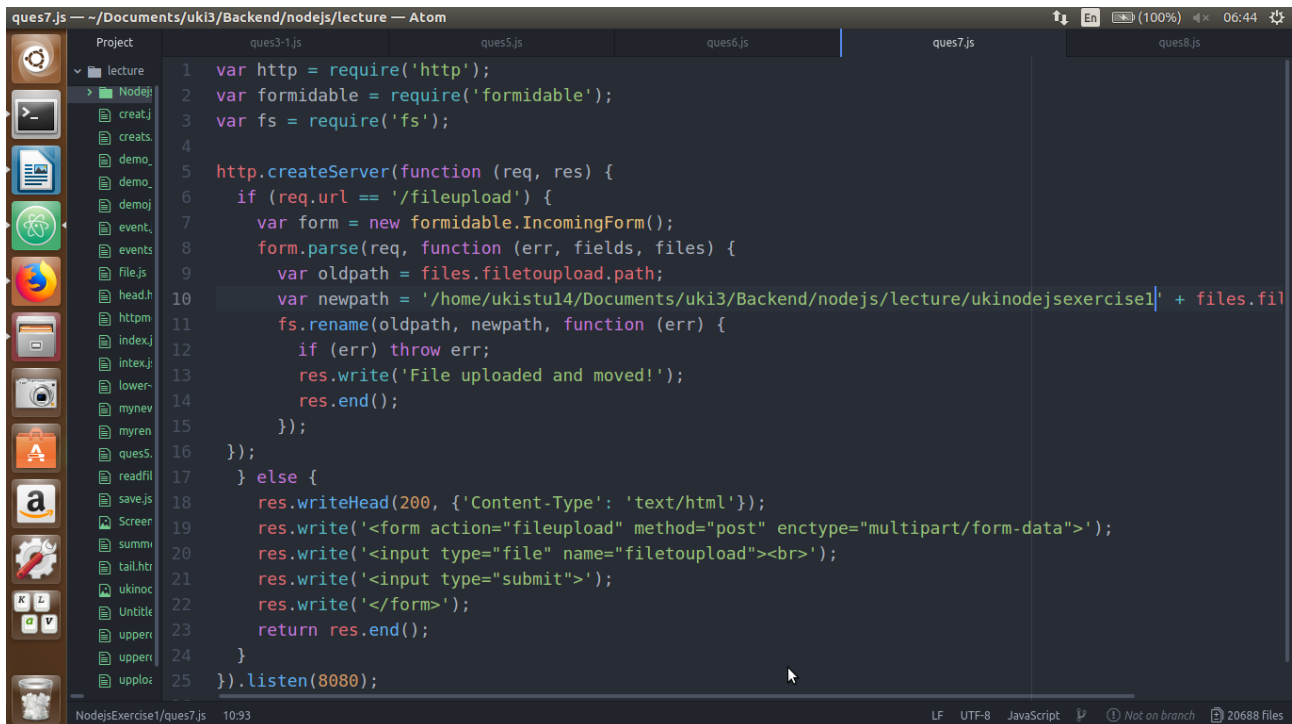
```
1 var http = require('http');
2 var uc = require('upper-case');
3 http.createServer(function (req, res) {
4     res.writeHead(200, {'Content-Type': 'text/html'});
5     res.write(uc("Uki is the best place to learn programming !"));
6     res.end();
7 }).listen(8080);
8
```



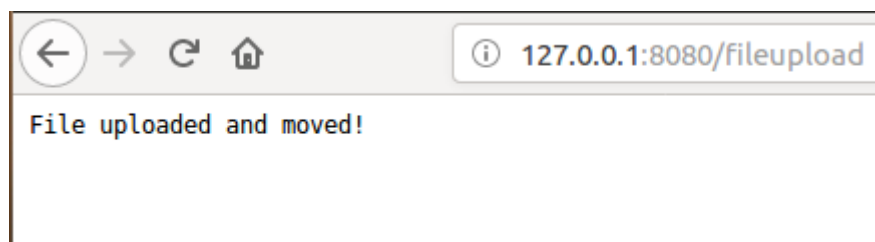
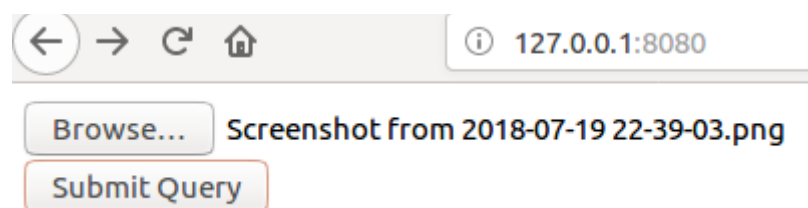
6. Create an event handler function that will say "I bark when I see strangers !" when a "bark" event is fired.

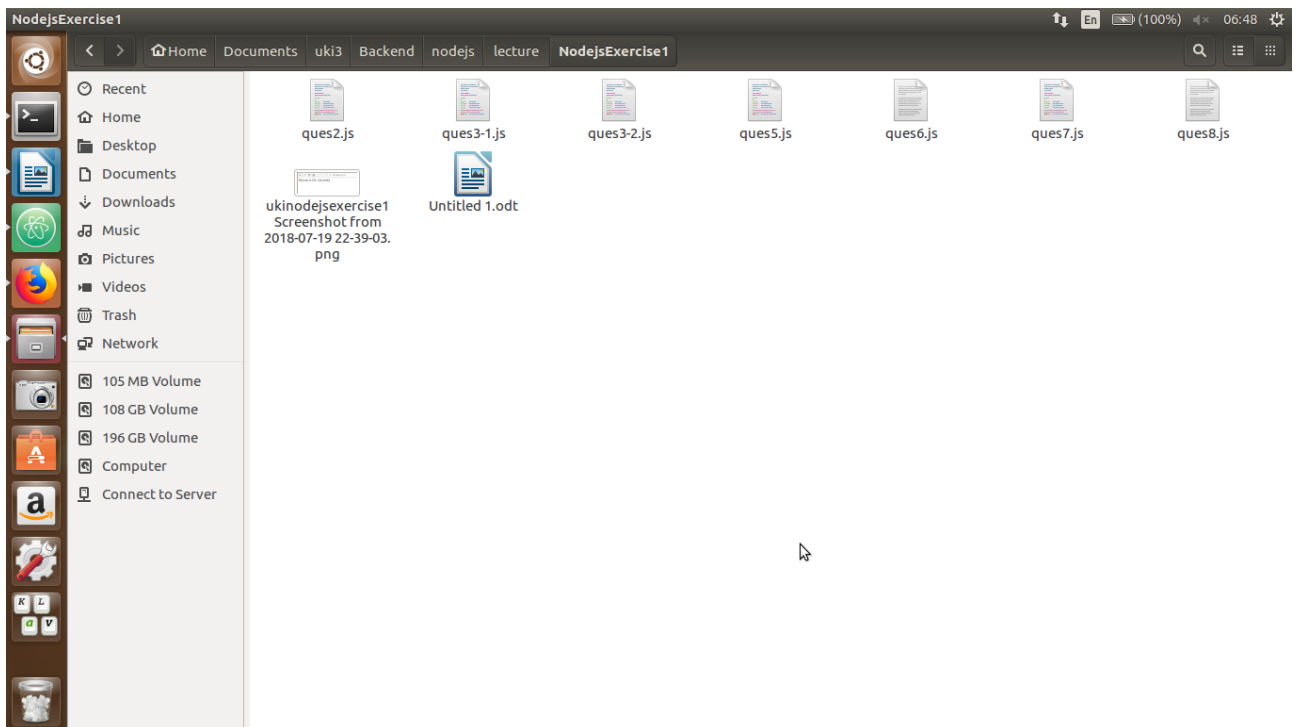
7. Install "formidable" module using npm and make a web page in Node.js that lets the user upload files to your computer.

7.1 Save that uploaded file into your Documents directory.



```
1 var http = require('http');
2 var formidable = require('formidable');
3 var fs = require('fs');
4
5 http.createServer(function (req, res) {
6   if (req.url == '/fileupload') {
7     var form = new formidable.IncomingForm();
8     form.parse(req, function (err, fields, files) {
9       var oldpath = files.fileupload.path;
10      var newpath = '/home/ukistul4/Documents/uki3/Backend/nodejs/lecture/ukinodejsexercisel' + files.fileupload.filename;
11      fs.rename(oldpath, newpath, function (err) {
12        if (err) throw err;
13        res.write('File uploaded and moved!');
14        res.end();
15      });
16    });
17   } else {
18     res.writeHead(200, {'Content-Type': 'text/html'});
19     res.write('<form action="/fileupload" method="post" enctype="multipart/form-data">');
20     res.write('<input type="file" name="fileupload"><br>');
21     res.write('<input type="submit">');
22     res.write('</form>');
23     return res.end();
24   }
25 }).listen(8080);
```





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.