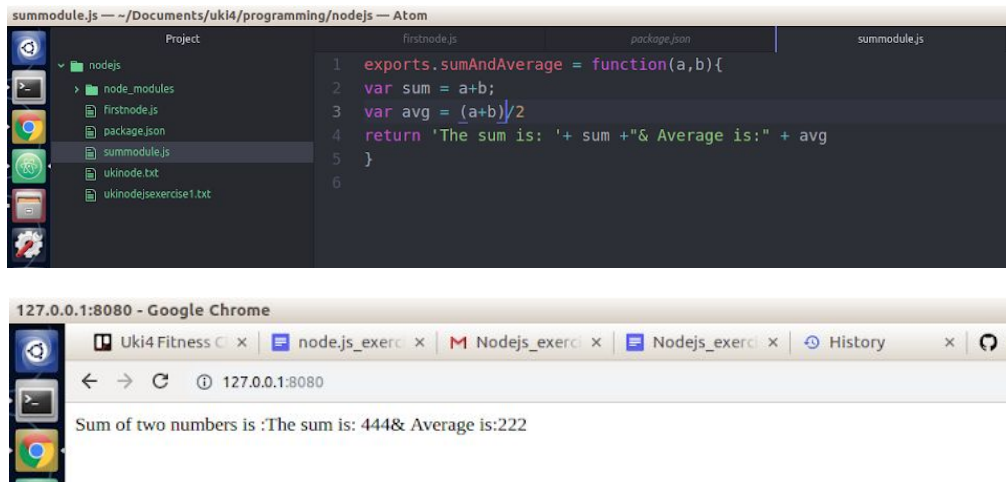
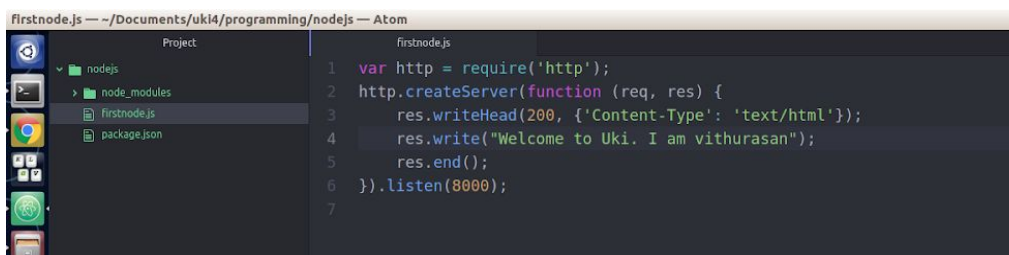
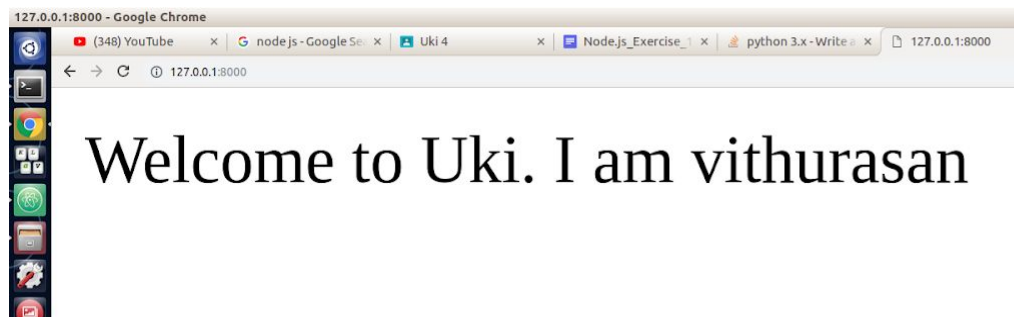


Node.js Exercise 1

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)

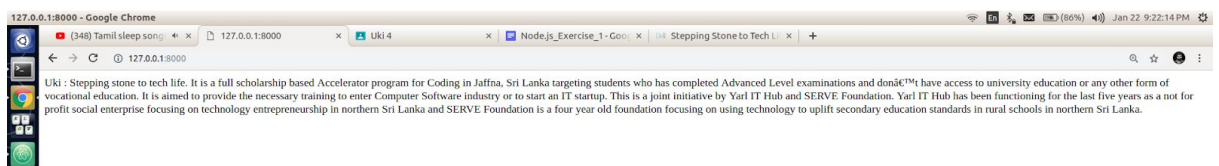
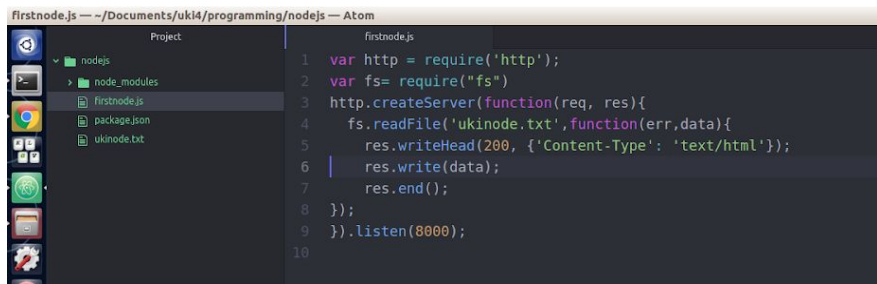


Node.js Exercise 1

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



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



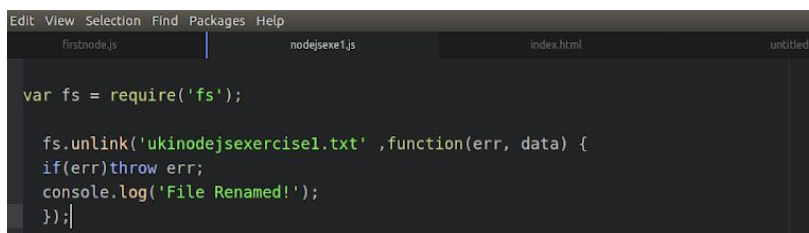
- 3.3 Append another paragraph about Uki and now serve the new file



- 3.4 Rename the file as ukinodejsexercise1.txt



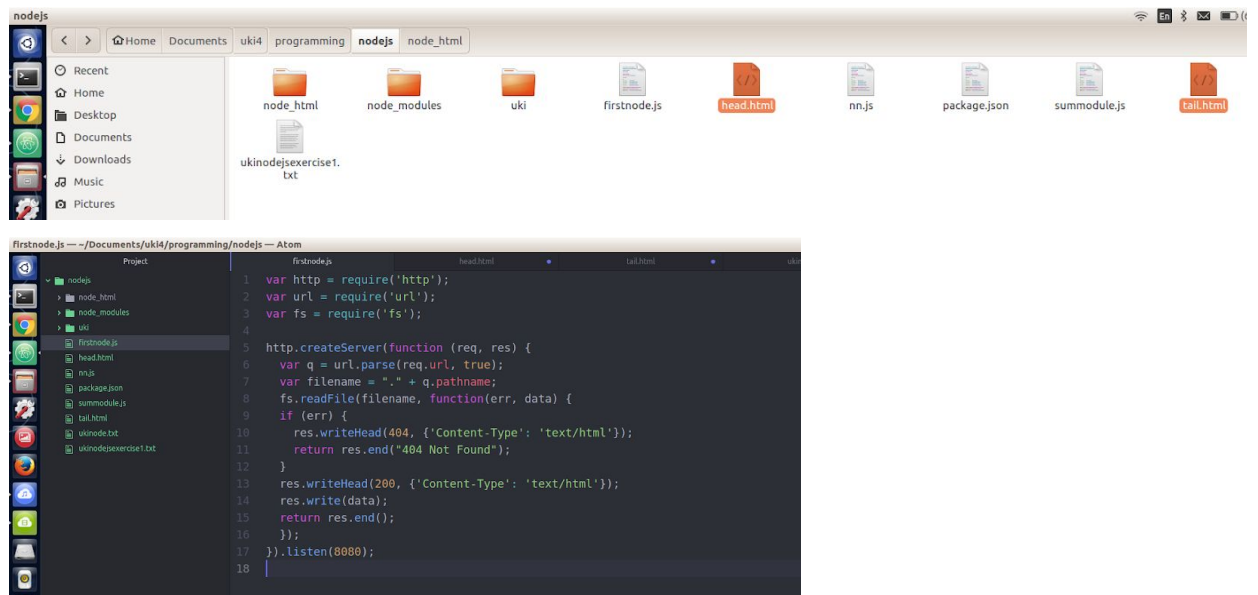
- 3.5 Delete the file you created



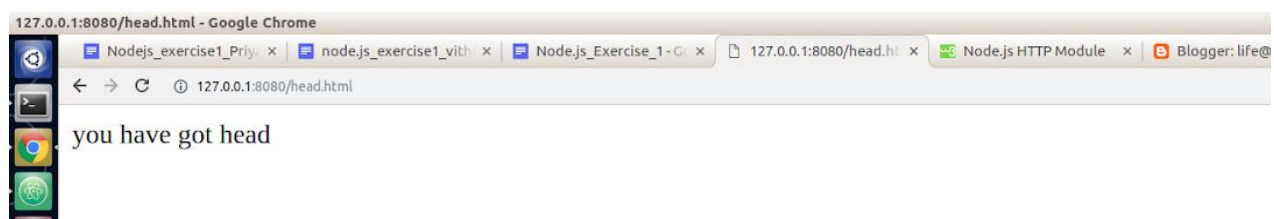
Node.js Exercise 1

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.

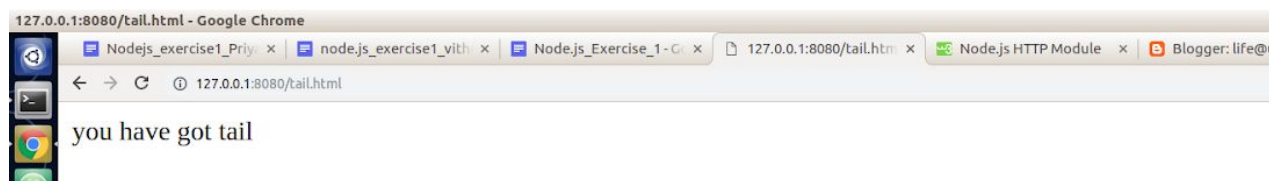
If you have followed the correct steps you should see two different results when opening these two addresses:



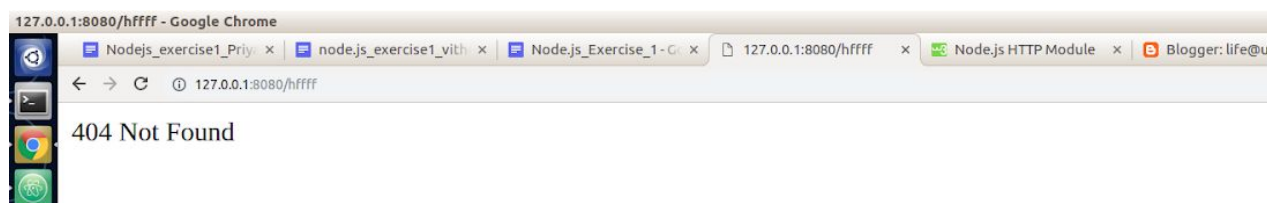
http://localhost:8080/head.html -> You have got head



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

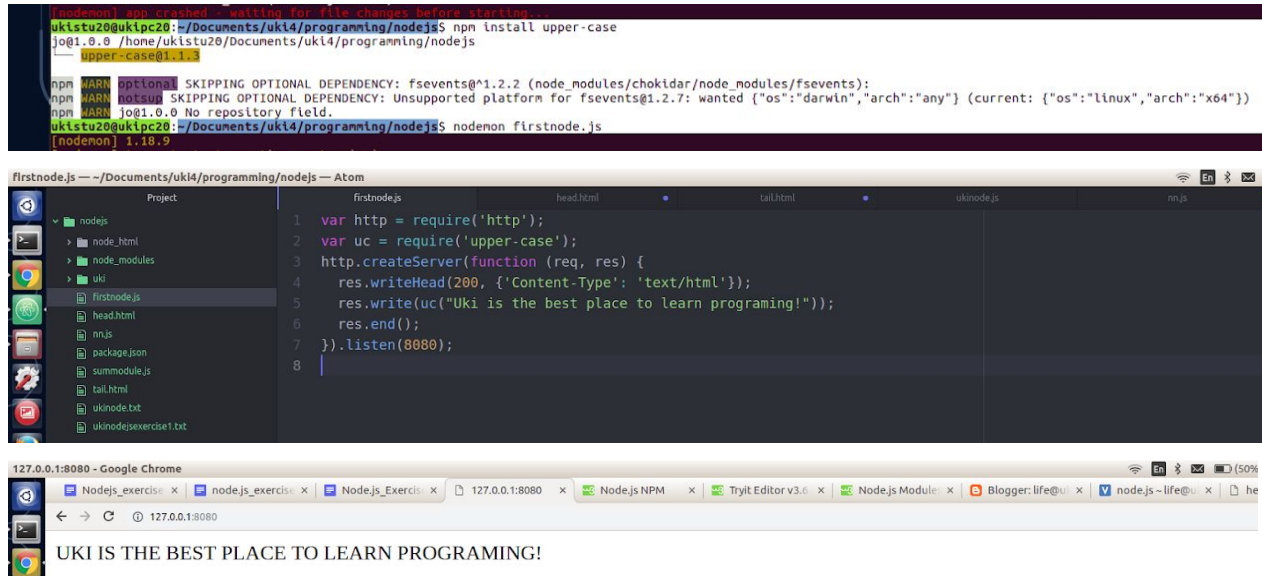


If error



Node.js Exercise 1

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.



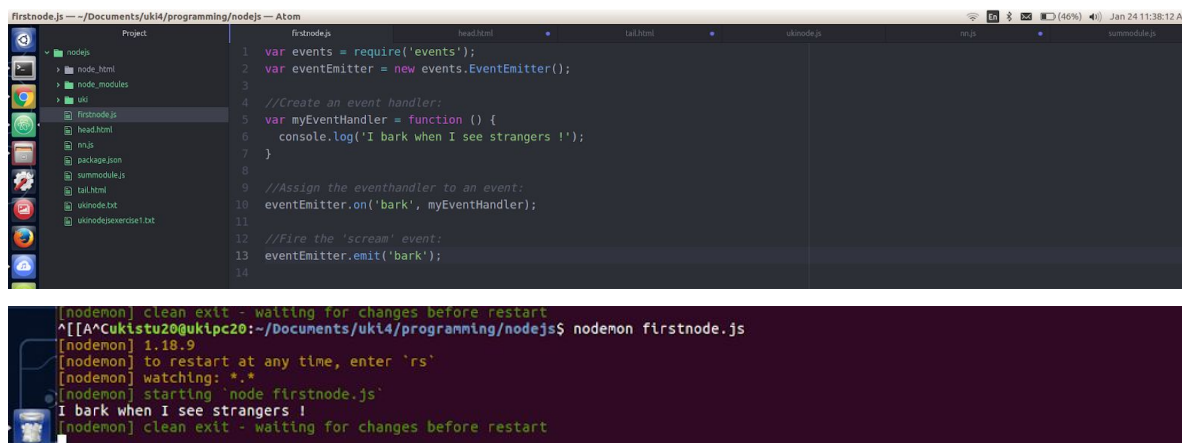
The screenshot shows a terminal window where the 'upper-case' package is installed using 'npm install upper-case'. It then shows the Atom editor with 'firstnode.js' containing a simple HTTP server that returns 'UKI IS THE BEST PLACE TO LEARN PROGRAMMING!'. Below, a Google Chrome browser shows the output of the server at 127.0.0.1:8080.

```
[node] npm cached - waiting for file changes before starting
ukistu20@ukipc20:~/Documents/uk14/programming/nodejs$ npm install upper-case
ukistu20@ukipc20:~/Documents/uk14/programming/nodejs$
npm WARN optional SKIPPING OPTIONAL DEPENDENCY: fsevents@1.2.2 (node_modules/chokidar/node_modules/fsevents):
npm WARN notsup SKIPPING OPTIONAL DEPENDENCY: Unsupported platform for fsevents@1.2.7: wanted {"os":"darwin","arch":"any"} (current: {"os":"linux","arch":"x64"})
ukistu20@ukipc20:~/Documents/uk14/programming/nodejs$ node firstnode.js
(node) 1.18.9
```

```
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
```

127.0.0.1:8080 - Google Chrome
UKI IS THE BEST PLACE TO LEARN PROGRAMMING!

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



The screenshot shows the Atom editor with 'firstnode.js' implementing an event emitter. It uses the 'events' module to create an EventEmitter, define a 'bark' event handler, and then emits the 'bark' event. Below, a terminal window shows the output of running 'node firstnode.js', which prints 'I bark when I see strangers !'.

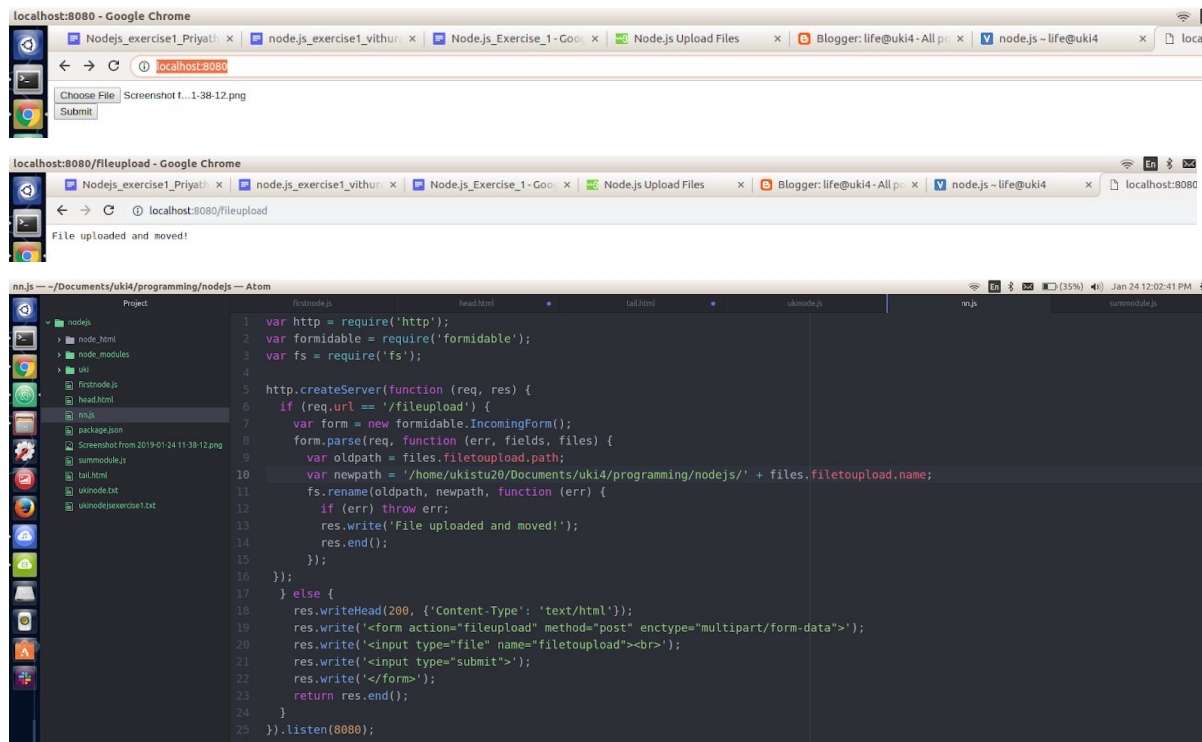
```
1 var events = require('events');
2 var EventEmitter = new events.EventEmitter();
3
4 //Create an event handler:
5 var myEventHandler = function () {
6   console.log('I bark when I see strangers !');
7 }
8
9 //Assign the event handler to an event:
10 EventEmitter.on('bark', myEventHandler);
11
12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

```
[node] Clean exit - waiting for changes before restart
ukistu20@ukipc20:~/Documents/uk14/programming/nodejs$ node firstnode.js
(node) 1.18.9
[node] to restart at any time, enter 'rs'
[node] watching: *.*
[node] starting 'node firstnode.js'
I bark when I see strangers !
[node] Clean exit - waiting for changes before restart
```

Node.js Exercise 1

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

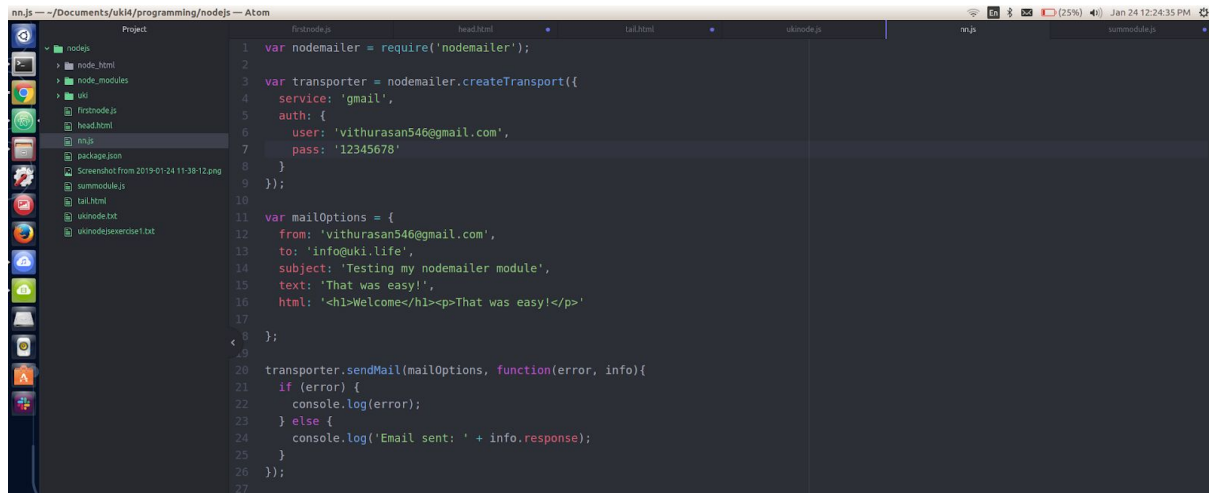
7.1 Save that uploaded file into your Documents directory.



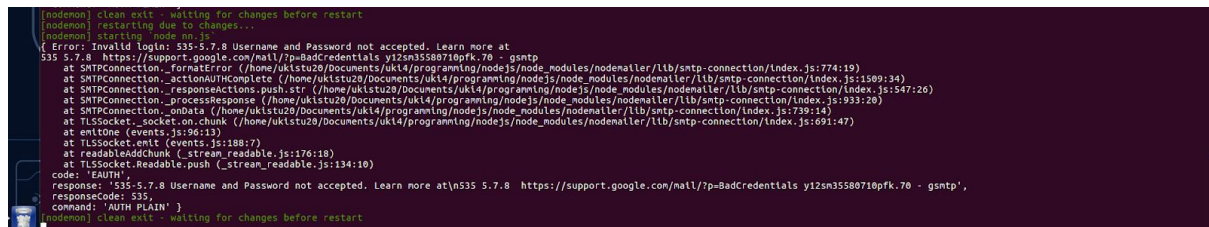
Node.js Exercise 1

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: 'vithurasan546@gmail.com',
7     pass: '12345678'
8   }
9 });
10
11 var mailOptions = {
12   from: 'vithurasan546@gmail.com',
13   to: 'info@uki.life',
14   subject: 'Testing my nodemailer module',
15   text: 'That was easy!',
16   html: '<h1>Welcome</h1><p>That was easy!</p>'
17 };
18
19 transporter.sendMail(mailOptions, function(error, info){
20   if (error) {
21     console.log(error);
22   } else {
23     console.log('Email sent: ' + info.response);
24   }
25 });
26
27
```



```
[nodemon] clean exit - waiting for changes before restart
[nodemon] restarting due to changes...
[nodemon] starting node on .js
535 5.7.8 https://support.google.com/mail/?p=BadCredentials y12sn35580710pfk.70 - gsntp
at SMTPConnection._formatError (/home/ukistu20/Documents/uki4/programming/nodejs/node_modules/nodemailer/lib/smtp-connection/index.js:774:19)
at SMTPConnection._actionAuthComplete (/home/ukistu20/Documents/uki4/programming/nodejs/node_modules/nodemailer/lib/smtp-connection/index.js:1569:34)
at SMTPConnection._processResponse (/home/ukistu20/Documents/uki4/programming/nodejs/node_modules/nodemailer/lib/smtp-connection/index.js:933:20)
at SMTPConnection._onData (/home/ukistu20/Documents/uki4/programming/nodejs/node_modules/nodemailer/lib/smtp-connection/index.js:739:14)
at TLSocket._socket.on.chunk (/home/ukistu20/Documents/uki4/programming/nodejs/node_modules/nodemailer/lib/smtp-connection/index.js:691:47)
at emitOne (events.js:113)
at TLSocket.emit (events.js:188:7)
at readableAddChunk (_stream_readable.js:176:18)
at TLSocket.Readable.push (_stream_readable.js:134:10)
code: 'AUTH'
response: '535-5.7.8 Username and Password not accepted. Learn more at\n535 5.7.8 https://support.google.com/mail/?p=BadCredentials y12sn35580710pfk.70 - gsntp',
responseCode: 535,
command: 'AUTH PLAIN' }
[nodemon] clean exit - waiting for changes before restart
```