

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)

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

http.createServer(function (req, res) {
  res.writeHead(200, {'Content-Type': 'text/html'});
  res.end('Welcome to uki,I'am sakila ');
}).listen(8080);
```

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

```
var http = require('http');
var fs = require('fs');
http.createServer (function(req,res))
fs.appendfile ('uki node.txt','Hey uki',
function (err){if(err)throwerr;
console.log ('saved');
});
```

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

```

var http = require('http');
var fs = require('fs')
http.createServer(function(req,res){
  fs.readFile ('uki node.txt',function (err,data){
    res.writeHead(200,{ 'Content-Type': 'text/html' });
    res.write ('welcome to uki. I am sakila');
    res.write (data);
    res.end();
  });
}).listen(8080);

```

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

```

var fs = (require('fs'));
fs.appendfile('ukinode.txt','I am an ukian',function(err){
  if(err)throwerr;
  console.log('saved!');
});|

```

3.4 Rename the file as ukinodejsexercise1.txt

```

var fs = require('fs');
fs.rename('ukinode.txt','ukinodejsexercise1.txt',function(err){
  if(err)throwerr;
  console.log('file Renamed');
});|

```

3.5 Delete the file you created

```
var fs = require('fs');
fs.unlink('ukinodejsexercise1.txt');
function(err){
if(err) throw err;
console.log('file Renamed!');
});|
```

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.

```
var http = require('http');
var caps = require('uppercase');
res.writeHead(200, {'Content-Type': 'text/html'});
res.write{ caps('uki is the best place to learn programming!')};
res.end();
}).listen(8080);
```

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

```
var action = require ('events');  
var emitter = new actionEventEmitter();  
var dogsound = function(){  
  console.log ('I bark when i see strangers!');  
}  
emitter.on('bark',dogsound);  
emitter.emit('park');
```

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.