Introduction to Node + NPM

Question 1: Installing node latest version and npm

Answer :

$ sudo apt update

Install *nodejs using* apt package manager:

$ sudo apt install nodejs npm

To verify :

$nodejs –version

To install NPM:

$sudo apt install npm

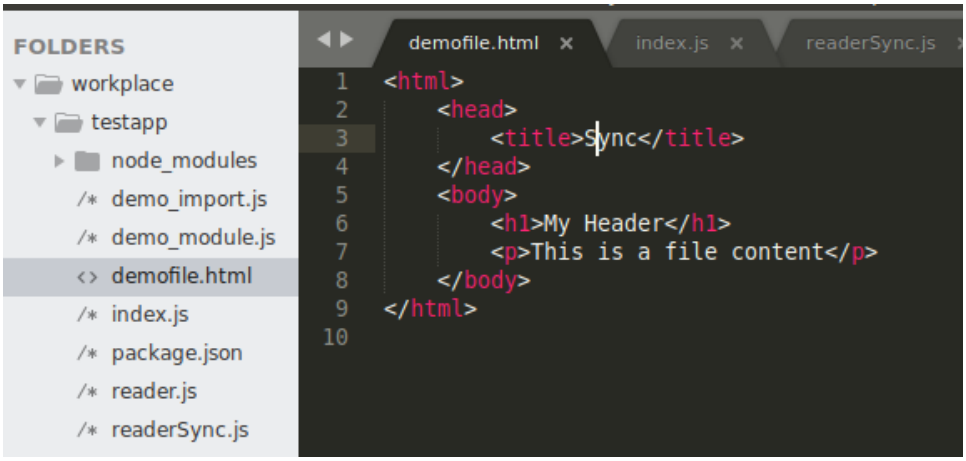
To verify :

$npm –version

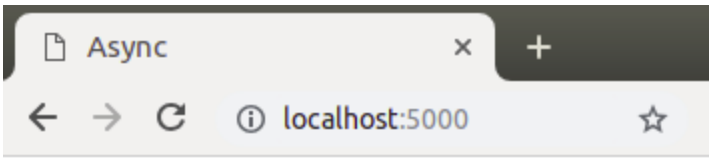
Question 2: Read file asynchronously and synchronously.

Ans:

Firstly create a **demofile** and use it in read operations.



1. **Async reading**



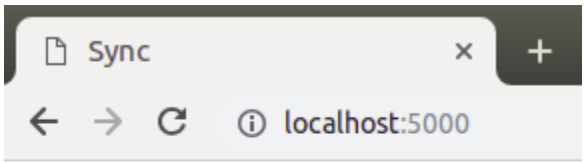
My Header

This is a file content

demofile.html | index.js | readerSync.js | reader.js

```
var http=require('http');
var fs=require('fs');
http.createServer(function(request,response){
    fs.readFile('demofile.html',
        function(err,data){
            response.writeHead(200,{'Content-Type':'text/html'});
            response.write(data);
            response.end();
        });
}).listen(5000);
```

2. **Sync reading:**



My Header

This is a file content

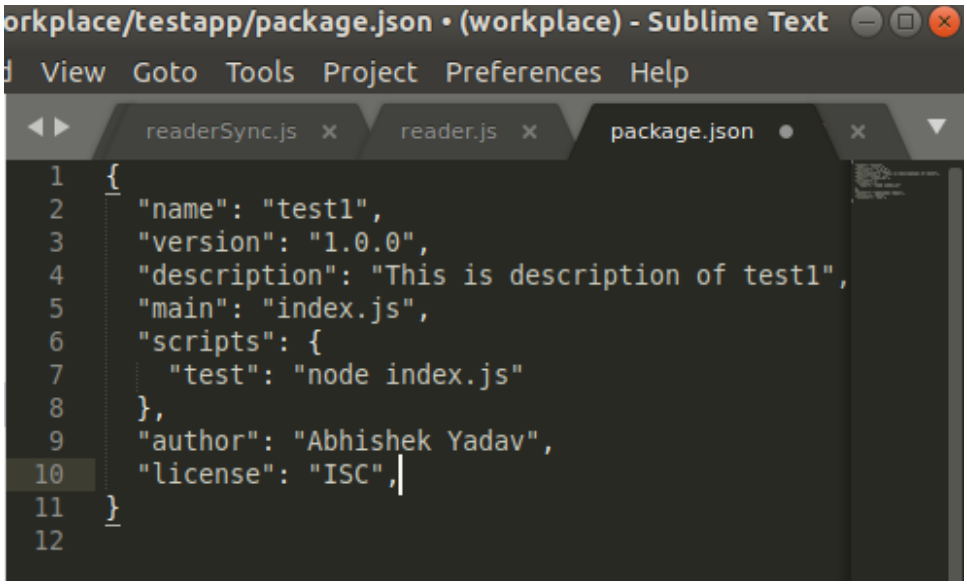
demofile.html | index.js | readerSync.js

```
var http=require('http');
var fs=require('fs');
http.createServer(function(request,response){
    var data=fs.readFileSync('demofile.html');
    response.writeHead(200,{'Content-Type':'text/html'});
    response.write(data);
    response.end();
}).listen(5001);
```

Question 3. Install dependency and devdepencies.

Ans: Installing dependencies.

Before installing dependencies :

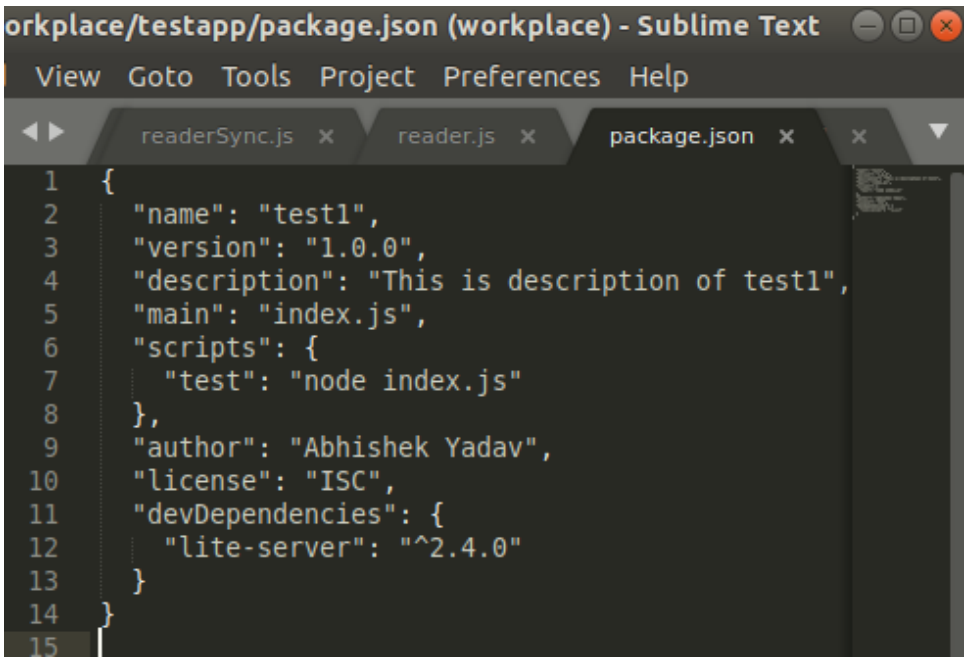


In the process of installation:

```
ttn@abhishek-yadav:~/Documents/workplace/testapp$ npm install lite-server --save-dev
test1@1.0.0 /home/ttn/Documents/workplace/testapp
+-- lite-server@2.4.0
| +-- browser-sync@2.26.3
| | +-- browser-sync-client@2.26.2
| | | +-- mitt@1.1.3
| | | `-- rxjs@5.5.12
| | |   `-- symbol-observable@1.0.1
| | +-- browser-sync-ui@2.26.2
| | | +-- async-each-series@0.1.1
| | | +-- socket.io-client@2.2.0
| | | | +-- backo2@1.0.2
| | | | +-- base64-arraybuffer@0.1.5
| | | | +-- component-bind@1.0.0
| | | | +-- component-emitter@1.2.1
| | | | +-- engine.io-client@3.3.2
| | | | | +-- component-inherit@0.0.3
| | | | | +-- ws@6.1.4
| | | | | +-- xmlhttprequest-ssl@1.5.5
| | | | | `-- yeast@0.1.2
| |   +-- y18n@3.2.1
| |   `-- yargs-parser@4.2.1
| +-- connect-history-api-fallback@1.6.0
| +-- connect-logger@0.0.1
| | `-- moment@2.24.0
| +-- lodash@4.17.11
| `-- minimist@1.2.0
`-- test1@0.4.5  extraneous

npm WARN optional Skipping failed optional dependency /chokidar/fsevents:
npm WARN notsup Not compatible with your operating system or architecture: fsevents@1.2.8
npm WARN test1@1.0.0 No repository field.
```

After installing devdependencies :

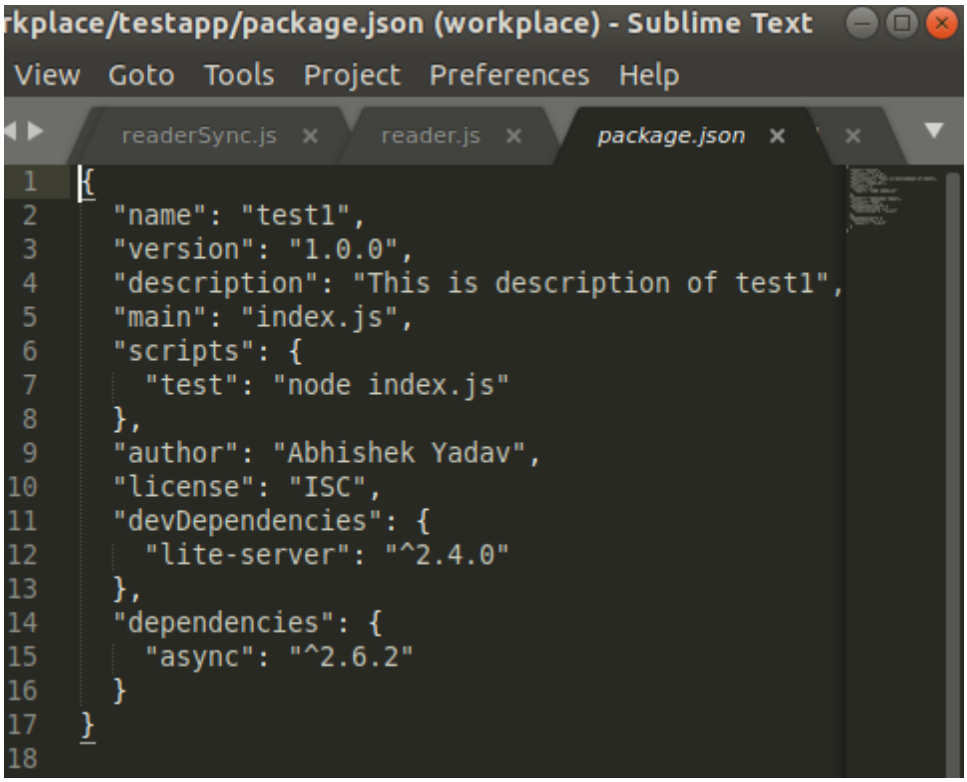


Installing production dependencies :

```
ttn@abhishek-yadav:~/Documents/workplace/testapp$ npm install async --save
test1@1.0.0 /home/ttn/Documents/workplace/testapp
+-- async@2.6.2
+-- lite-server@2.4.0
| `-- browser-sync@2.26.3
|   `-- portscanner@2.1.1
|     `-- async@1.5.2
`-- test1@0.4.5 extraneous

npm WARN optional Skipping failed optional dependency /chokidar/fsevents:
npm WARN notsup Not compatible with your operating system or architecture: fsevents@1.2.8
npm WARN test1@1.0.0 No repository field.
ttn@abhishek-yadav:~/Documents/workplace/testapp$
```

After installation :



Question 4: Creating module and importing & exporting them.

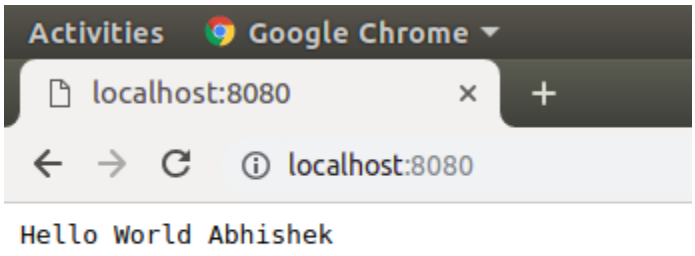
Ans: Creating and exporting the module.

Importing the module:

```
package  demo_module.js ×  demo_import.js ×
1  var imported_module=require('./demo_module');
2  imported_module.myFunction();
```

Question 5: Creating a http server.

Ans:

```
index.js ×  readerSync.js ×  reader.js ×
1  const http=require('http');
2
3  http.createServer(function(req,res){
4      res.writeHead(200,{
5          'Content-Type':'text/plain'
6      });
7      res.end("Hello World Abhishek");
8  }).listen(8080);
```

```
tn@abhishek-yadav:~/Documents/workplace/testapp$ node index
```