# Node.js CheatSheet



### Node.js CLI Commands

Node.js comes with npm. So when you install Node.js, npm also gets install in your system.

```
# initialize a Node.js project
npm init
# run a JS file using Node.js
node filename.js
# install a node package
npm install package-name
```

#### Modules in Node.js (Export)

We can use **module.exports** to export an object/array/function from a file.

```
app.js
// app.js
const obj = {
  greeting: "Hello, world!",
  sayHello: function() {
    console.log(this.greeting);
module.exports = obj;
```

#### Modules in Node.js (Import)

To import a module in another file, use the require function:

```
index.js
// index.js
const app = require('./app');
app.sayHello(); // prints "Hello, world!"
```

# Reading a file (File System)

fs module provides access to the user's file system. To read the contents of a file, use the **fs.readFile()** function.

```
index.js

const fs = require('fs');

// read file.text and log its data
fs.readFile('file.txt', 'utf8', (err, data) ⇒ {
  if (err) throw err;
  console.log(data);
});
```

# Writing to a file (File System)

To write data to a file, use the fs.writeFile() function:

```
index.js

const fs = require('fs');

fs.writeFile('file.txt', 'Hello, world!', (err) ⇒ {
  if (err) throw err;
  console.log('Data written to file');
});
```

#### Create an HTTP Server

We can use the http module to create a server. To create an HTTP server, use the <a href="http.createServer">http.createServer</a>() function:

```
index.js

const http = require('http');

const server = http.createServer((req, res) ⇒ {
  res.writeHead(200, {'Content-Type': 'text/plain'});
  res.end('Hello, world!');
});

server.listen(3000, () ⇒ {
  console.log('Server listening on port 3000');
});
```

### Make an HTTP Request

We can use <a href="http:request">http:request()</a> function from the http module to make a request.

```
. .
                            index.js
const http = require('http');
const options = {
  hostname: 'localhost',
  port: 3000,
  path: '/',
  method: 'GET'
};
const req = http.request(options, (res) ⇒ {
  console.log(`STATUS: ${res.statusCode}`);
  console.log(`HEADERS: ${JSON.stringify(res.headers)}`);
  res.setEncoding('utf8');
  res.on('data', (chunk) \imp {
    console.log(`BODY: ${chunk}`);
  1):
  res.on('end', () \Rightarrow {
    console.log('No more data in response.');
  });
});
req.on('error', (e) ⇒ {
  console.error(`problem with request: ${e.message}`);
});
// send the request
req.end();
```