

# ***Node fs module (file system)***

## ***fs.readFile (asynchronous)***

*hello.txt*

helloooooo there!!!!

*node\_fs\_module.js*

```
// node file system module
const fs = require('fs');

// file in current directory: ./
fs.readFile('./hello.txt', (err, data) => {
  if (err) {
    console.log('errorrrrrrr');
  }
  console.log(data);
})
```

Both files are in the same directory.

In command line, run:

```
node node_fs_module.js
```

Returns:

```
<Buffer 68 65 6c 6c 6f 6f 6f 6f 6f 6f 20 74 68
65 72 65 21 21 21 21>
```

If no encoding specified, raw buffer is returned.

```
node_fs_module.js

// node file system module
const fs = require('fs');

// file in current directory: ./
fs.readFile('./hello.txt', (err, data) => {
  if (err) {
    console.log('errorrrrrrr');
  }
  console.log(data.toString('utf8'));
})
```

hello.txt

helloooooo there!!!!

f

Both files are in the same directory.

In command line, run:

```
node node_fs_module.js
```

Returns:

```
helloooooo there!!!!
```

Default encoding is utf-8.

## ***fs.readFileSync (synchronous)***

```
node_fs_module.js

// node file system module
const fs = require('fs');

// fs.readFile is ASYNC
// file in current directory: ./
fs.readFile('./hello.txt', (err, data) => {
  if (err) {
    console.log('errorrrrrrr');
  }
  console.log('1', data.toString('utf8'));
})

// fs.readFileSync is SYNC
const file = fs.readFileSync('./hello.txt');
console.log('2', file.toString());
```

*hello.txt*

helloooooo there!!!!

Both files are in the same directory.

In command line, run:

```
node node_fs_module.js
```

Returns:

```
2 helloooooo there!!!!
```

```
1 helloooooo there!!!!
```

Did not execute in order because 1 is async and 2 is synchronous.

## ***fs.appendFile***

```
node_fs_module.js

// node file system module
const fs = require('fs');

// Append text to file
// will create file if it doesnt exist
fs.appendFile('./hello.txt', ' This is cool!', err => {
  if (err) {
    console.log(err);
  }
})
```

*hello.txt*

helloooooo there!!!!

Both files are in the same directory.

In command line, run:

```
node node_fs_module.js
```

Changes file to:

*hello.txt*

helloooooo there!!!! This is cool!

## ***fs.writeFile***

```
node_fs_module.js

// node file system module
const fs = require('fs');

// WRITE
fs.writeFile('bye.txt', 'Sad to see you go', err => {
  if (err) {
    console.log(err);
  }
})
```

In command line, run:

```
node node_fs_module.js
```

Creates file in same directory:

```
bye.txt

Sad to see you go
```

## ***fs.unlink (deletes file)***

```
node_fs_module.js

// node file system module
const fs = require('fs');

// DELETE
fs.unlink('./bye.txt', err => {
  if (err) {
    console.log(err);
  }
  console.log('bye.txt deleted')
})
```

In command line, run:

```
node node_fs_module.js
```

Deletes bye.txt file in same directory. Command line output:

```
bye.txt deleted
```