

8/12/25

## # Modules.export & require #

→ always available

- `require("./xyz.js")` ⇒ ye phere run hoga  
↳ to add another code file

// code ⇒ ye uske baad

## • // module

// modules protects their variables and functions from leaking. (by default)

⇒ To do this:

→ `module.exports = calculateSum;`

( `const calculateSum = require("./sum.js");` )

## • more than one:

|   |                            |
|---|----------------------------|
| <del>module</del> <code>module.exports = {</code> | <code>{ x,</code>          |
| <code>  x : x,</code>                             | <code>calculateSum,</code> |
| <code>  calculateSum : calculateSum,</code>       | <code>y,</code>            |
| <code>};</code>                                   |                            |

new way

→ `const obj = require("./sum.js");`

⇓

`obj.calculateSum(a, b);`

better

→ `const { x, calculateSum } = require("./sum.js")`

↳ destructuring.

To use package.json

{ "type": "module" }



CommonJS modules  
(CJS)

ES Modules  
(mjs)

→ module.exports  
⇒ require

→ import  
export

→ By default used in Node

→ by default used in  
React, angular

→ Older way

→ Newer way

→ Synchronous

→ Async option is available

→ Non-strict mode

→ strict mode

• "ES modules"

⇒ To export:

export function ... {  
... }

To import

import { calculateSum } from  
"./sum.js"

# To make file as module #

/calculate → (folder)

multiply.js

index.js

const { multiply } = require("../calculate")

const { ... } = require("../")

module.exports = { multiply, ... }

const { calculateSum } = require("../calculate")

strict mode:

ismein directly hum "z=10" ye nhi kar sakte hai  
hume "var z=10" hi karna hoga.  
→ commonjs module mai directly kar sakte hai.

```
console.log(module.exports);
```

⇒ {} ⇒ empty object

↓

```
module.x = module.exports.x = x;
```

```
module.exports.calculateSum = calculateSum;
```