

Note:- When we call only require ('./path');
why we aren't able to get the methods &
variable from that path.

→ Bcoz, all the code of the module is
wrapped inside a function. & its scope
is only the function.

→ that function is called IIFE

IIFE → Immediately Invoked Function Expression.

So, IIFE is a function that got immediately invoked.

i.e. (function () {

}()); → created anonymous function & immediately called it.

So, (function () {

// all code of the module goes inside here.

}());

→ IIFE should be wrapped inside () so that it becomes expression.

why we need it?

① It immediately invoke the code, if we need that immediate ~~invok~~ invocation during code loading.

② It keeps variable & function safe.

③ How are variables & functions are private in different module?

→ IIFE & require (statement)

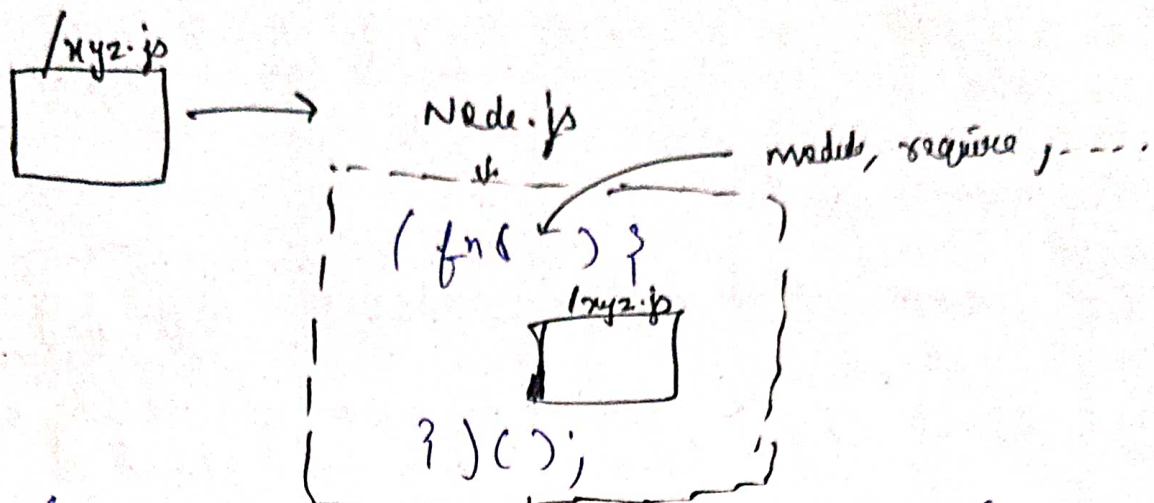
↑
(wrapping code)

④ How do you get access to module exports?

→ Actually, module is a parameter in IIFE. So, Node.js is providing us access to module.

& it is passing module as parameter

② How are we getting access to require?
→ Node also provides require as parameter in IIFE



So, Node.js wrapped that code in a IIFE

V8 engine

new v8 engine execute that code

Five steps to mechanism of require (if path)

1) Resolving the module

- it checks ~~whether~~ whether the ~~path is~~ ^{data is coming from path is}

→ ./localpath

→ node: module

→ ./json

then it resolves that module

2) Loading the module

↳ file content is loaded according to file type

3) wraps inside IIFE (compile step)

4) Evaluation → module.exports happens / returned out

5) Caching → so, next time all ^{to get data} loading not occur again.