

is digit() method:
checks whether the string consists

1.

⇒ command prompt

→ node -v

→ npm -v

→ npm help ↵

→ npm install -h

→ npm help-search update

⇒ npm init

⇒ npm init --yes

⇒ npm config set init-author-name "Mounika"

⇒ npm set init-license "MIT"

⇒ npm init --yes

default values setup

→ npm config get init-author-name

→ npm get init-license

⇒ delete the default values

⇒ npm config delete init-license

→ npm config delete init-author-name

→ npm init --yes ↵

⇒ npm install moment

- delete -

⇒ npm install moment --save

→ npm install --save-dev

→ npm uninstall moment --save

→ npm uninstall lodash --save-dev

⇒ install Globally:-

⇒ npm install moment -g

→ npm uninstall moment -g

→ npm └→ package name.

list of packages:-

npm list → show like the structure.

→ npm list --depth 1

→ npm list --depth 0 → list of all the packages

& no dependency

→ Global packages

npm list --global --depth 0

Node JS:-

Node JS is an open-source, cross-platform runtime environment for developi.

Smeltic version in the:-

npm install lodash --save.

list of packages:-

* locally *

npm list → It will display the tree like structure

→ it shows depend on package

eg lodash doesn't depend on anything else.

we can also restrict the

list --depth 1

↳ It giving the immediate dependencies of the lite saves

list --depth 0

↳ list of all the packages

for the global packages

→ list --global true --depth 0

→ list of global installed globally

* npm versioning *

npm install lodash --save

lodash enter by latest version.

4 → Major ver

16 → minor ver

1 → patch version

→ first create folder

symantic version

*
npm install lodash@3.3.0 --save

↳ the package.json file updated to 3.3.0.

*
npm install lodash@4.12. --save.

↳ It shows latest patch version.

*
npm install lodash@4 --save

↳ It shows latest major & patch version.

*
npm install ⇒ is the mostly common command

~ restrict upgrading major & minor versions → only patch version update in latest version.

*
npm install

⇒ update the package latest version.

*
⇒ npm update lodash --save ↑ update to latest version.

*
⇒ npm update --dev --save

↳ latest version of dev dependency

*
⇒ npm update ⇒ all the dependencies & the dev dependencies

→ we update the package globally all

*
npm install npm@latest -g

npm list --depth 0

npm prune → command to remove ^{additionally} ~~the~~ a project, don't require

npm list --depth 0

Shortcuts

npm init -v → it will use package.json file with default values

② npm install → install the package locally

npm install lodash

③ npm install lodash -S → ^{into} package save in to package.json file

④ npm install (package name) -D (→ Dev)

npm shortcuts → docs.npmjs.com/misc/config

npm scripts

To write basic program

app.js

console.log("basic")

terminal → node app.js

→ go to package.json then change to "start": "node app.js"

→ command prompt → npm start →

↳ o/p

Node JS:-

JS uses an event-driven, non-blocking model that makes it lightweight & efficient, Node.js package's ecosystem, npm is the largest ecosystem of open source libraries in the world

- ⇒ A platform which allows us to run JS on a server
- ⇒ Read, delete & update files
- ⇒ easily communicate with a db

why Node.js so popular:-

- It uses JS.
- very fast
- Huge ecosystem.
- Huge ecosystem of open source packages (npm)
- Great for real time services (like chat's)

what we will learn

- ⇒ The inner workings of Node.js
 - V8 engine
 - modules
 - event emitter
 - The file system
- ⇒ creating web servers
 - Routing
 - Express
 - Templating
- ⇒ make a Node.js application

⇒ node - v

⇒ basic program

⇒ node app

⇒ chang dir ⇒ cd..

⇒ cd folder -

⇒ flw n. > node app

⇒ The v8 engine:-

JS engines:- A JS engine takes JS, & converts it into something it does understand - machine code.

⇒ The node is written in c++

→ at the heart of Node.js is the v8 engine.

→ The v8 engine converts our JS into machine code.

Node.js with v8

JS → ^{via} Node.js (v8) → machine code.

⇒ The Global object:-

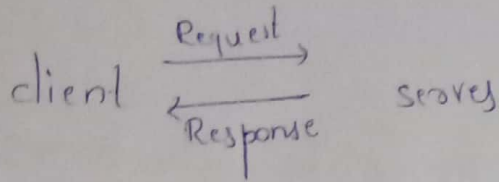
the obj's are available in all modules. Some of these obj's aren't actually in the global space but in the module scope.

→ app.js

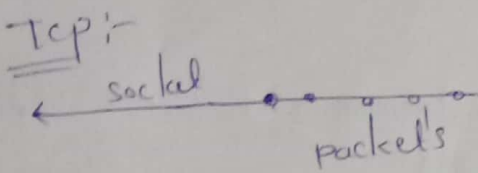
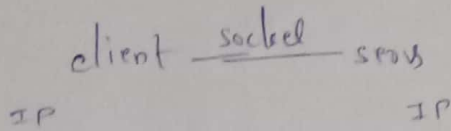
↳ console.log("hi")

clients & servers

every server identified by own ip add.



Protocols: a set of communication rules, that two sides agree to use when communicating



Ports:

A program running on a computer can listen for req's sent to a particular port no.

=> Eg: 192.168.1.100:3000

=> creating server

```
var http = require('http');
```

```
var server = http.createServer(function (req, res) {
```

```
  res.writeHead(200, { 'content-type': 'text/plain' });
```

```
  res.end('hey data');
```

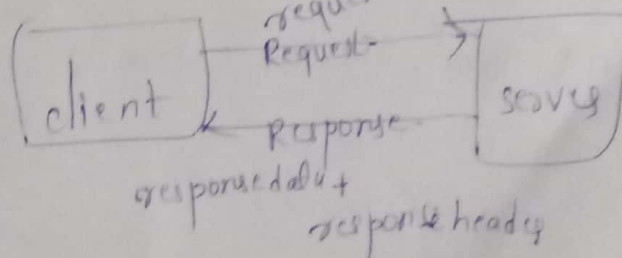
```
});
```

```
server.listen(3000, '127.0.0.1')
console.log('listening')
```

Response Headers

* Response Headers

-> content-type
status



Readable streams:-

Streams:-

Writable streams — allow node.js to write data to a stream

Readable " — " " " " read " "

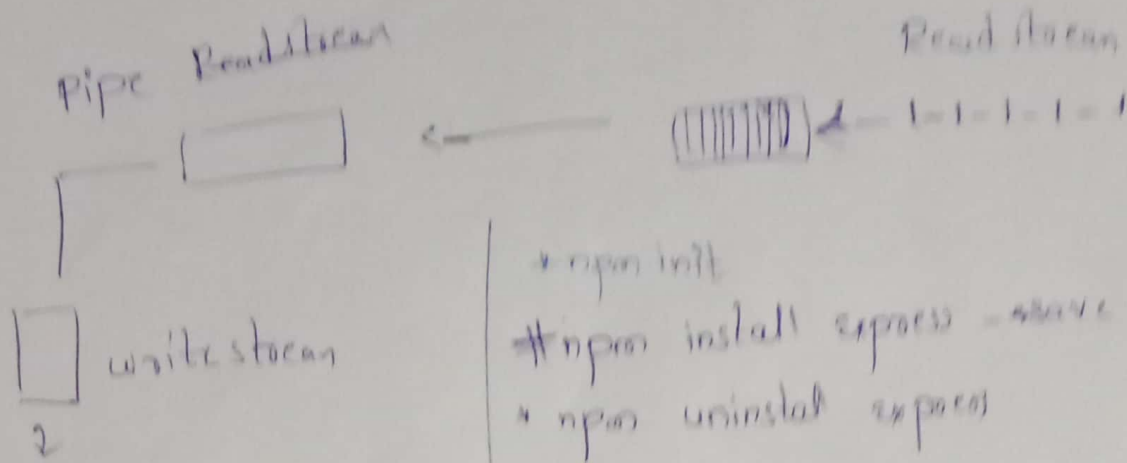
Duplex — can read & write to a stream

```
* var http = require('http')
var fs = require('fs');
var myReadStream = fs.createReadStream(__dirname + '/readme.txt',
    { utf8: true });
myReadStream.on('data', function(chunk) {
    console.log('new chunk received:');
    console.log(chunk);
});
```

Writable streams:-

```
var http = require('http');
var fs = require('fs');
var myReadStream = fs.createReadStream(__dirname +
    '/readme.txt', { utf8: true });
var myWriteStream = fs.createWriteStream(__dirname +
    '/write.txt');
myReadStream.on('data', function(chunk) {
    console.log('new chunk:');
    myWriteStream.write(chunk);
});
```

Pipes



* Serving HTML pages

* node package manager

node install express
npm uninstall express

- * npm init
- * npm install express -save
- * npm uninstall express
- * npm install
- npm install nodemon -g
- nodemon filename.js