

WSTĘP DO NODE.JS

NODE, NVM, NPM...

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NODE.JS

- Środowisko uruchomieniowe
- V8
- Brak window, document, alert
- CLI
- Serwer
- <https://nodejs.org>

```
➔ ~ node
Welcome to Node.js v24.4.0.
Type ".help" for more information.
> const d = 'd'
undefined
> console.log("Hello " + `Dawi${d}`)
Hello Dawid
undefined
> 0.1 * 0.2
0.020000000000000004
> NaN === NaN
false
> Number.MIN_VALUE > 0
true
> [1, 2, 3] + [4, 5, 6]
'1,2,34,5,6'
> parseInt("f*ck")
NaN
> parseInt("f*ck", 16)
15
> window
Uncaught ReferenceError: window is not defined
> document
Uncaught ReferenceError: document is not defined
```


ZAINSTALUJĘ NODE RAZ
I BĘDZIE DZIAŁAĆ WSZĘDZIE

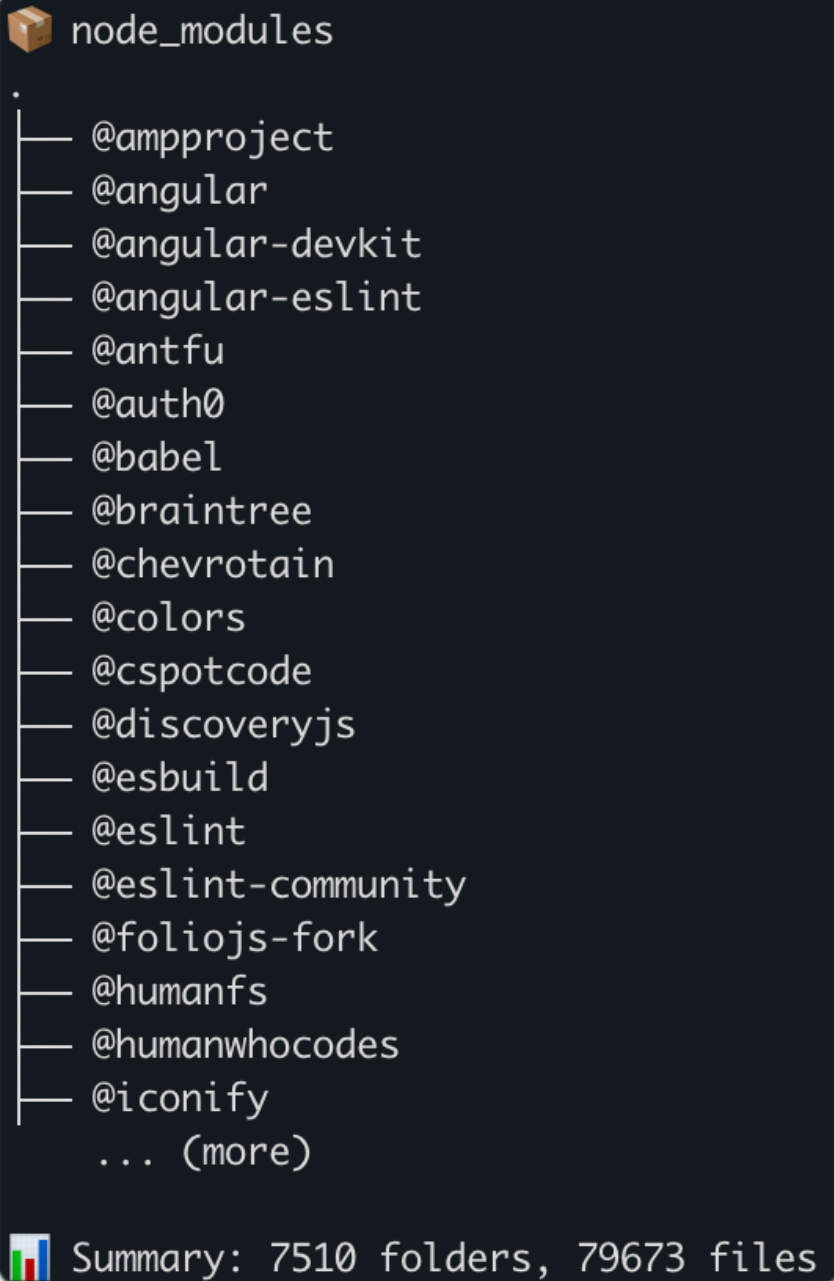
NVM

- Zarządzanie wersjami Node.js
- Konkretny Node dla projektu
- .nvmrc
- Prostota
- Bezpieczeństwo
- <https://github.com/nvm-sh/nvm>

```
→ Projects nvm ls
  v16.20.2
  v22.8.0
  v22.12.0
  v24.3.0
->  v24.4.0
default -> 24 (-> v24.4.0)
iojs -> N/A (default)
unstable -> N/A (default)
node -> stable (-> v24.4.0) (default)
stable -> 24.4 (-> v24.4.0) (default)
lts/* -> lts/jod (-> N/A)
lts/argon -> v4.9.1 (-> N/A)
lts/boron -> v6.17.1 (-> N/A)
lts/carbon -> v8.17.0 (-> N/A)
lts/dubnium -> v10.24.1 (-> N/A)
lts/erbium -> v12.22.12 (-> N/A)
lts/fermium -> v14.21.3 (-> N/A)
lts/gallium -> v16.20.2
lts/hydrogen -> v18.20.8 (-> N/A)
lts/iron -> v20.19.5 (-> N/A)
lts/jod -> v22.19.0 (-> N/A)
→ Projects nvm use 22
Now using node v22.12.0 (npm v10.9.0)
```


NPM

- Package manager
 - Instalacja
 - Publikacja
- package.json
 - Skrypty
 - Zależności
- <https://www.npmjs.com/>



The screenshot shows a file explorer window titled 'node_modules'. It displays a list of subdirectories, each preceded by a small folder icon. The list includes: @ampproject, @angular, @angular-devkit, @angular-eslint, @antfu, @auth0, @babel, @braintree, @chevrotain, @colors, @cspotcode, @discoveryjs, @esbuild, @eslint, @eslint-community, @foliojs-fork, @humanfs, @humanwhocodes, @iconify, and an ellipsis followed by '(more)'. At the bottom of the window, there is a summary bar with a small bar chart icon and the text 'Summary: 7510 folders, 79673 files'.

```
node_modules
├── @ampproject
├── @angular
├── @angular-devkit
├── @angular-eslint
├── @antfu
├── @auth0
├── @babel
├── @braintree
├── @chevrotain
├── @colors
├── @cspotcode
├── @discoveryjs
├── @esbuild
├── @eslint
├── @eslint-community
├── @foliojs-fork
├── @humanfs
├── @humanwhocodes
├── @iconify
├── ... (more)
```

Summary: 7510 folders, 79673 files

npm install

ZAWSZE DZIAŁA TAK SAMO
NA KAŻDYM KOMPUTERZE



yarn

pnpm

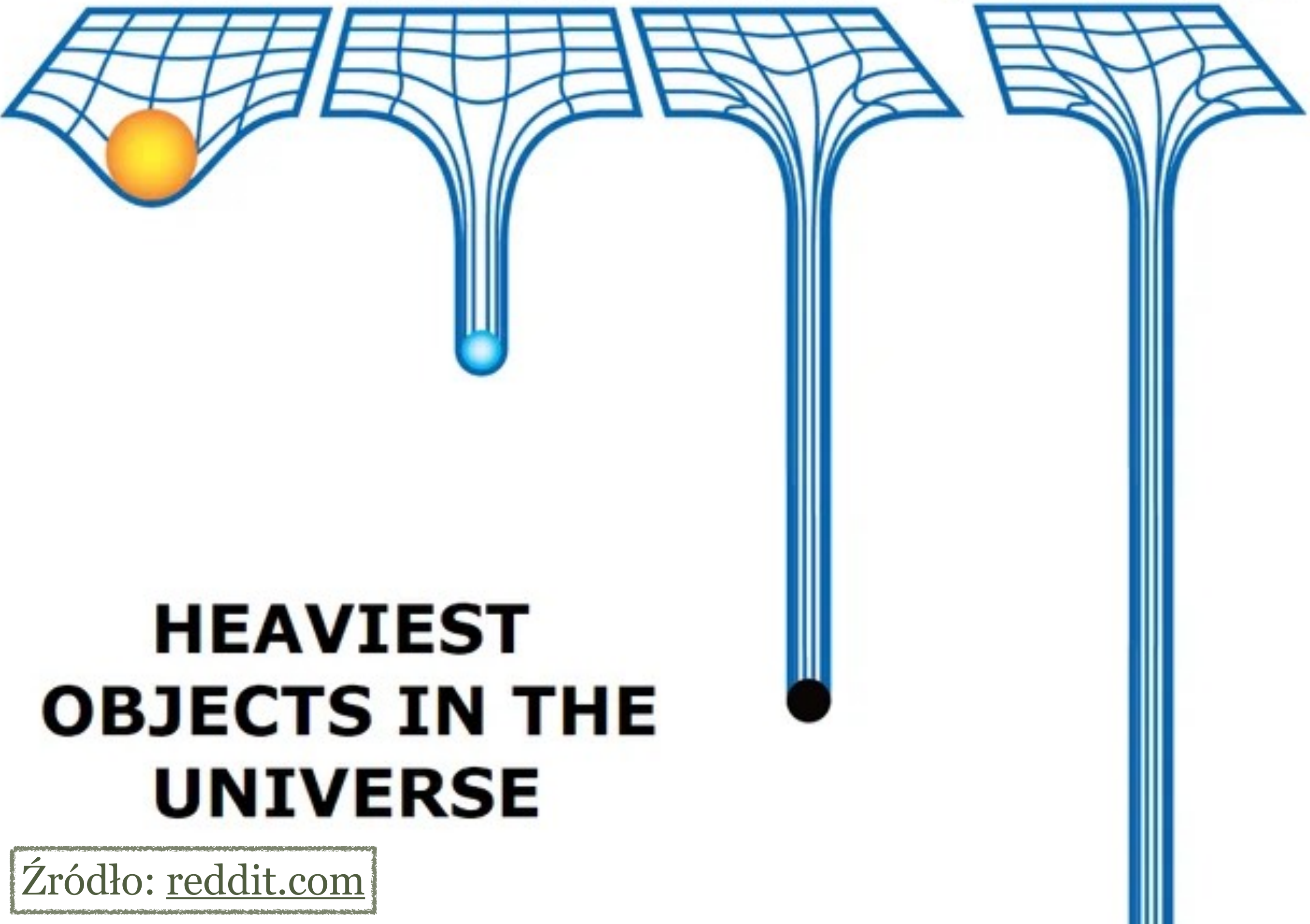


Sun

Neutron star

Black hole

node_modules



**HEAVIEST
OBJECTS IN THE
UNIVERSE**

Źródło: [reddit.com](https://www.reddit.com)

JS

$x \% 2 !== 0$

is-odd npm v3.0.1 downloads 2.3M/month downloads 57M Travis passing

Returns true if the given number is odd, and is an integer that does not exceed the JavaScript MAXIMUM_SAFE_INTEGER.

Please consider following this project's author, [Jon Schlinkert](#), and consider starring the project to show your ❤️ and support.

Install

Install with npm:

```
$ npm install --save is-odd
```

Usage

Weekly Downloads
269,847

downloads 2.3M/month

„Dziwne... u mnie działa.”

- *każdy programista JavaScript*