

Choose another country or region to see content specific to your location

Europe

Continue >

**Kubernetes**  
in Production Best Practices

Build and manage highly available production-ready Kubernetes clusters

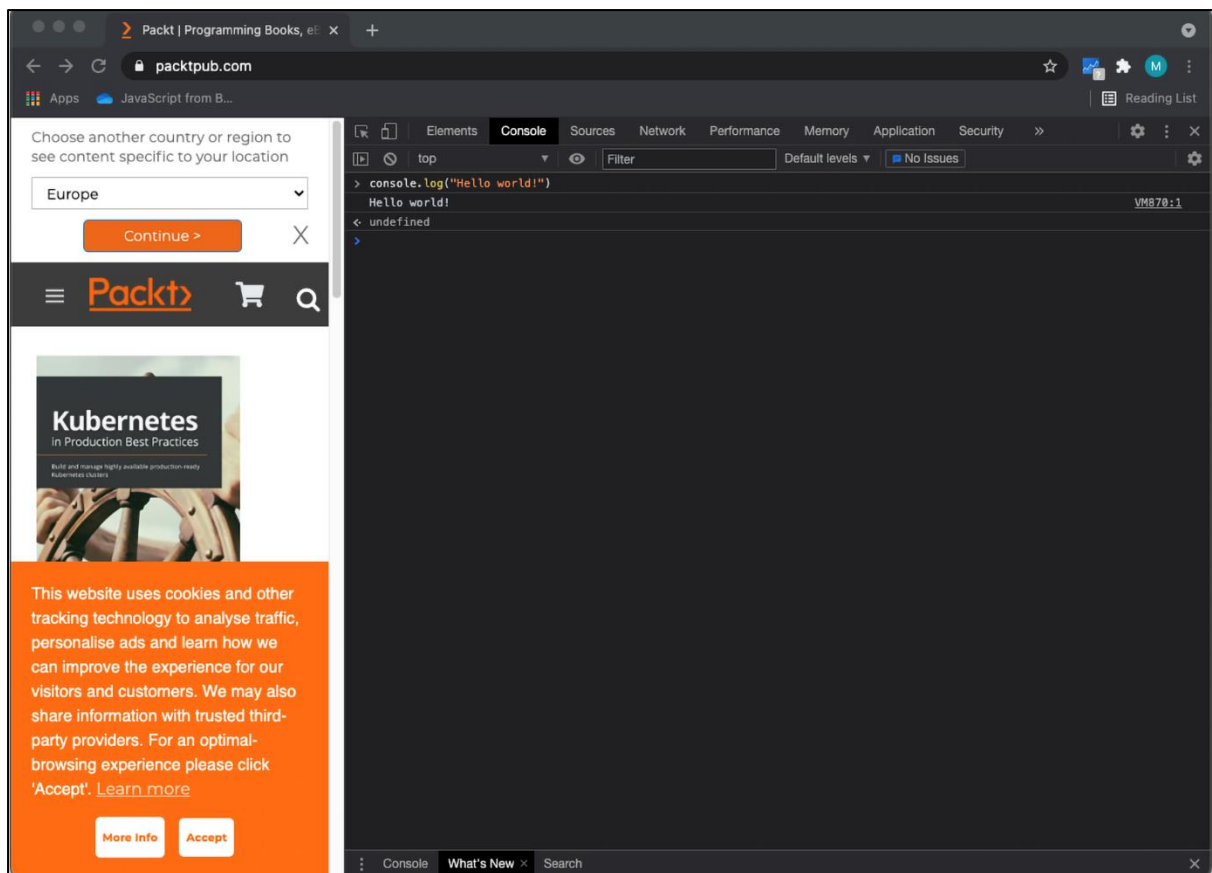
This website uses cookies and other tracking technology to analyse traffic, personalise ads and learn how we can improve the experience for our visitors and customers. We may also share information with trusted third-party providers. For an optimal-browsing experience please click 'Accept'. [Learn more](#)

More Info Accept

Reading List

... pper mainmaincontent.page-main div.columns div.column.main div div ...

Console What's New x Search



This page says

Hi there!

OK

This page says

Saying hi from a different file!

OK

This page says

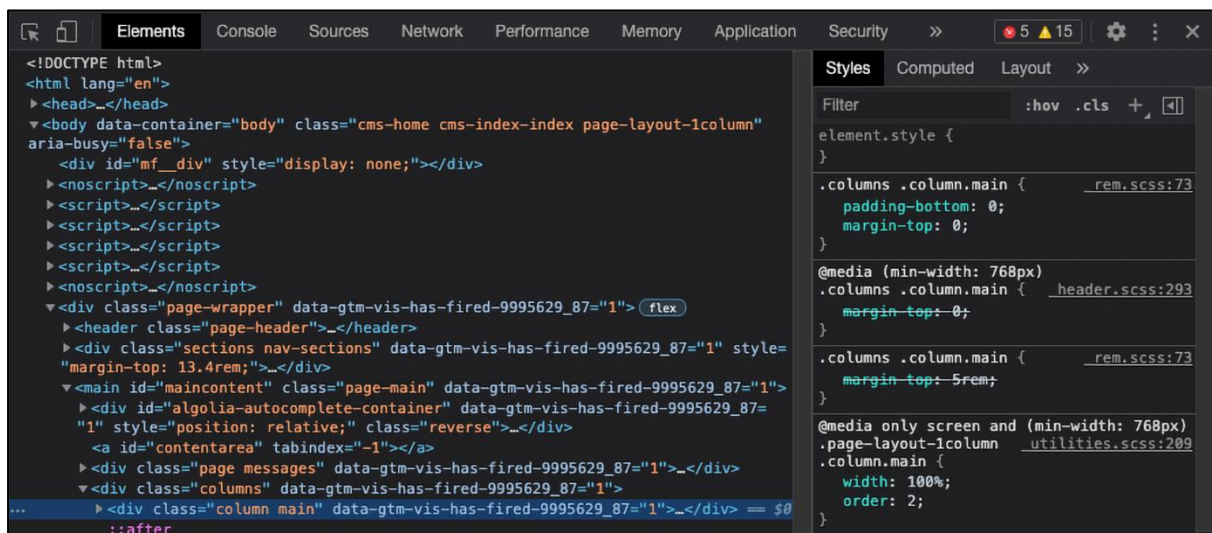
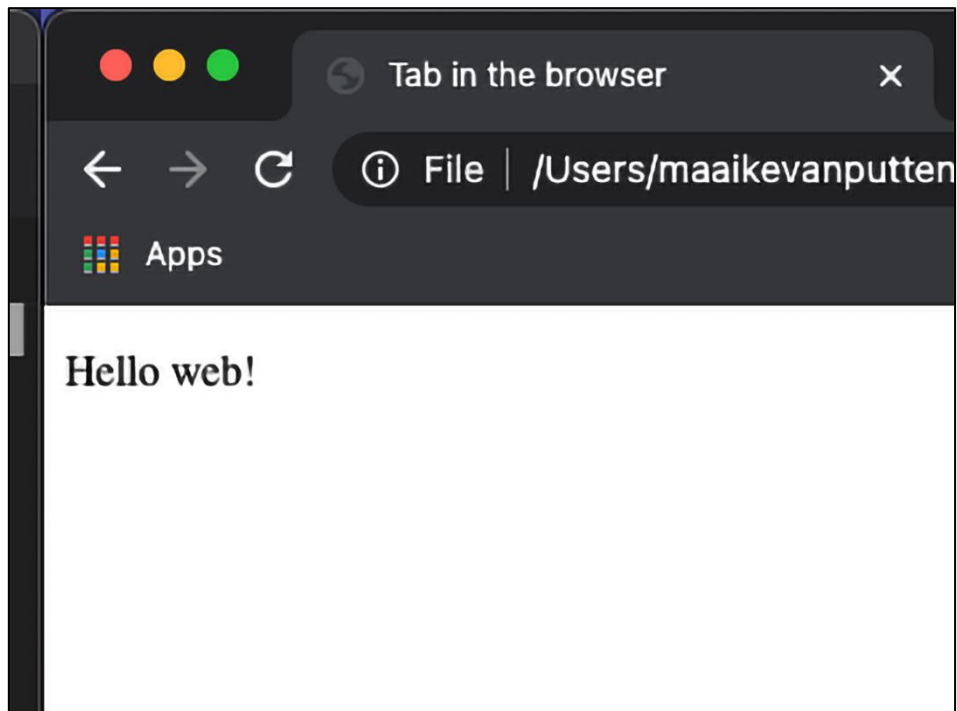
Hi! How are you?

Great! I'm learning JavaScript as we speak

Cancel

OK

## Chapter 9: The Document Object Model



```
Elements Console Sources Network Performance Memory Application Security Lighthouse >> [Settings] [Filter] Default levels [No Issues]

> console.dir(window) VM1228:1

▼ Window [Object]
  ▶ 0: global {window: global, self: global, location: {…}, closed: false, frames: global, …}
  ▶ 1: Window {0: Window, window: Window, self: Window, document: document, name: "", location: Location, …}
  ▶ 2: global {window: global, self: global, location: {…}, closed: false, frames: global, …}
  ▶ 3: global {window: global, self: global, location: {…}, closed: false, frames: global, …}
  ▶ 4: global {window: global, self: global, location: {…}, closed: false, frames: global, …}
  $: undefined
  ▶ AlgoliaBase64: {_keyStr: "ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz0123456789+/", encode: f, decode: f, mage…
    BASE_URL: "https://www.packtpub.com/"
    BlockContentDetail: "&lt;p style=&quot;text-align: center;&quot;&gt;&l Show more (127 kB) Copy
    ChromePaymentMode: "direct"
    ChromepayButtonName: ""
    ChromepayEnabled: "0"
  ▶ DataLayer: {events: {…}, shared: {…}, geo: {…}, consent: {…}, loaded: f, …}
  ▶ FeefoOpenReviewsAccordion: f ()
  ▶ FeefoToggle: f ()
  ▶ GoogleAnalyticsObject: "ga"
  ▶ GoogleAnalytics: {}
  ▶ GoogleAnalytics: f Dd(a,b,c)
  ▶ HeapUserId: ""
  ▶ JSON3: {noConflict: f, stringify: f, parse: f, runInContext: f}
  ▶ JsMutationObserver: f JsMutationObserver(callback)
  ▶ MaxMiniCartItemDisplay: "10"
  ▶ NREUM: {loader_config: {…}, o: {…}, setPageViewName: f, setCustomAttribute: f, setErrorHandler: f, …}
  ▶ POWR_RECEIVERS: (3) [{…}, {…}, {…}]
  ▶ alert: f alert()
```

```
Elements Console Sources Network Performance Memory Application Security Lighthouse Adblock Plus [4] [Settings] [Filter] Default levels [4 Issues: 4]

> console.dir(window.history) VM1048:1

▼ History [Object]
  ▶ heappushstate: f ()
  ▶ heappreplacestate: f ()
  ▶ length: 14
  ▶ pushState: f ()
  ▶ replaceState: f ()
  ▶ scrollRestoration: "auto"
  ▶ state: null
  ▶ [[Prototype]]: History
    ▶ back: f back()
    ▶ forward: f forward()
    ▶ go: f go()
    ▶ length: (...)
    ▶ pushState: f pushState()
    ▶ replaceState: f replaceState()
    ▶ scrollRestoration: (...)
    ▶ state: (...)
    ▶ constructor: f History()
    ▶ Symbol(Symbol.toStringTag): "History"
    ▶ get length: f length()
    ▶ get scrollRestoration: f scrollRestoration()
    ▶ set scrollRestoration: f scrollRestoration()
    ▶ get state: f state()
    ▶ [[Prototype]]: Object
```

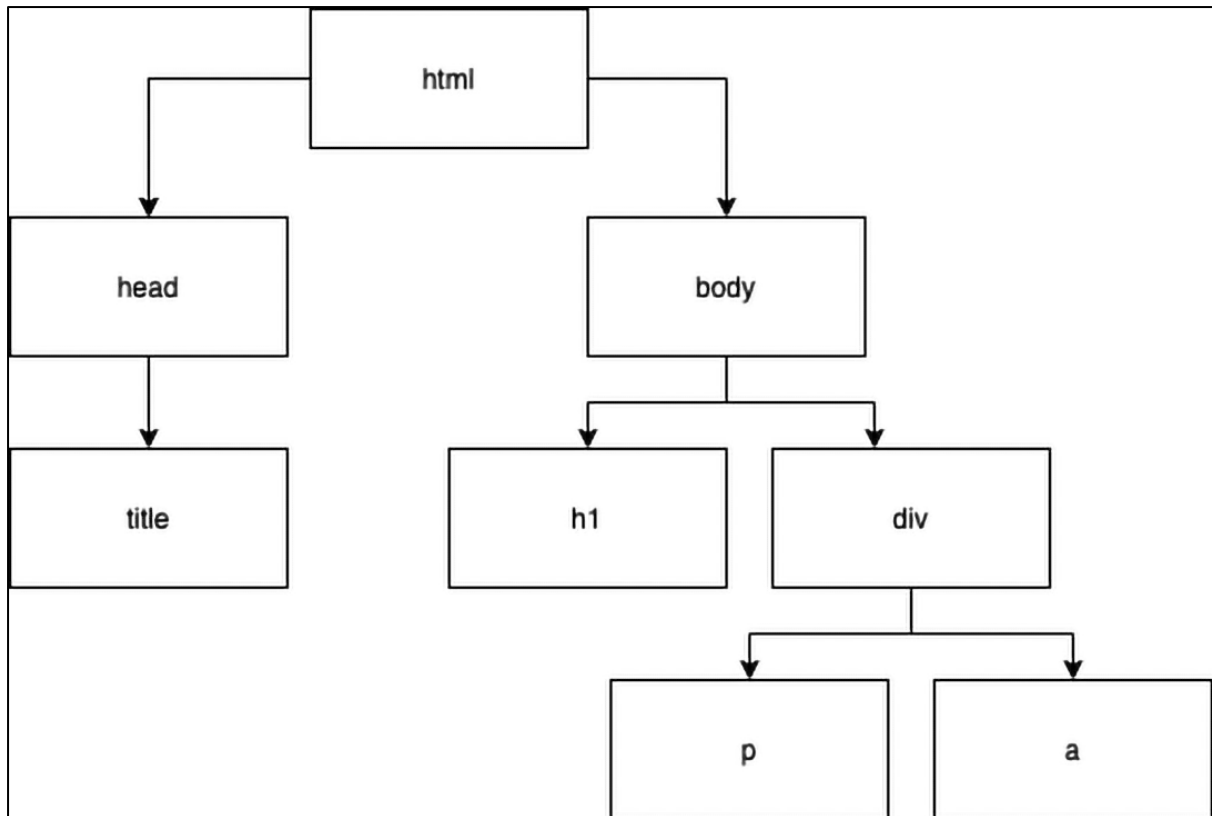
```
Elements Console Sources Network Performance Memory Application Security Lighthouse >>
top Filter Default levels No Issues
> console.dir(navigator) VM1305:1

Navigator
  appName: "Netscape"
  appVersion: "5.0 (Macintosh; Intel Mac OS X 10_15_7) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/90.0.4430.85 Safari/537..."
  bluetooth: Bluetooth {}
  clipboard: Clipboard {}
  connection: NetworkInformation {onchange: null, effectiveType: "4g", rtt: 50, downlink: 8, saveData: false}
  cookieEnabled: true
  credentials: CredentialsContainer {}
  deviceMemory: 8
  doNotTrack: null
  geolocation: Geolocation {}
  hardwareConcurrency: 16
  hid: HID {onconnect: null, ondisconnect: null}
  keyboard: Keyboard {}
  language: "en-GB"
  languages: (3) ["en-GB", "en-US", "en"]
  locks: LockManager {}
  maxTouchPoints: 0
  mediaCapabilities: MediaCapabilities {}
  mediaDevices: MediaDevices {ondevicechange: null}
  mediaSession: MediaSession {metadata: null, playbackState: "none"}
  mimeTypes: MimeTypeArray {0: MimeType, 1: MimeType, 2: MimeType, 3: MimeType, application/pdf: MimeType, application/x-goo...}
  online: true
  permissions: Permissions {}
  platform: "MacIntel"
  plugins: PluginArray {0: Plugin, 1: Plugin, 2: Plugin, Chrome PDF Plugin: Plugin, Chrome PDF Viewer: Plugin, Native Client...}
  presentation: Presentation {defaultRequest: null, receiver: null}
  product: "Gecko"
  productSub: "20030107"
  scheduling: Scheduling {}
  serial: Serial {onconnect: null, ondisconnect: null}
  serviceWorker: ServiceWorkerContainer {controller: null, ready: Promise, oncontrollerchange: null, onmessage: null, onmess...}
  storage: StorageManager {}
  usb: USB {onconnect: null, ondisconnect: null}
  userActivation: UserActivation {hasBeenActive: true, isActive: true}
  userAgent: "Mozilla/5.0 (Macintosh; Intel Mac OS X 10_15_7) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/90.0.4430.85 Saf..."
  userAgentData: NavigatorUAData {brands: Array(3), mobile: false}
  vendor: "Google Inc."
  vendorSub: ""
  wakeLock: WakeLock {}
  webdriver: false
  webkitPersistentStorage: DeprecatedStorageQuota {}
  webkitTemporaryStorage: DeprecatedStorageQuota {}
  xr: XRSystem {ondevicechange: null}
  __proto__: Navigator
```

```
Elements Console Sources Network Performance Memory Application Security Lighthouse Adblock Plus 4 Issues
top Filter Default levels 4 Issues
> console.dir(location) VM1353:1

Location
  ancestorOrigins: DOMStringList {length: 0}
  assign: f assign()
  hash: ""
  host: "www.packtpub.com"
  hostname: "www.packtpub.com"
  href: "https://www.packtpub.com/"
  origin: "https://www.packtpub.com"
  pathname: "/"
  port: ""
  protocol: "https:"
  reload: f reload()
  replace: f replace()
  search: ""
  toString: f toString()
  valueOf: f valueOf()
  Symbol(Symbol.toPrimitive): undefined
  [[Prototype]]: Location
```



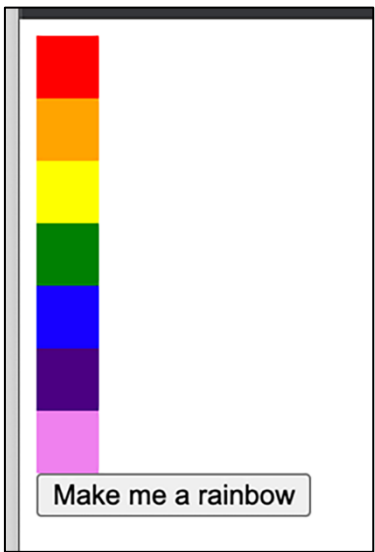
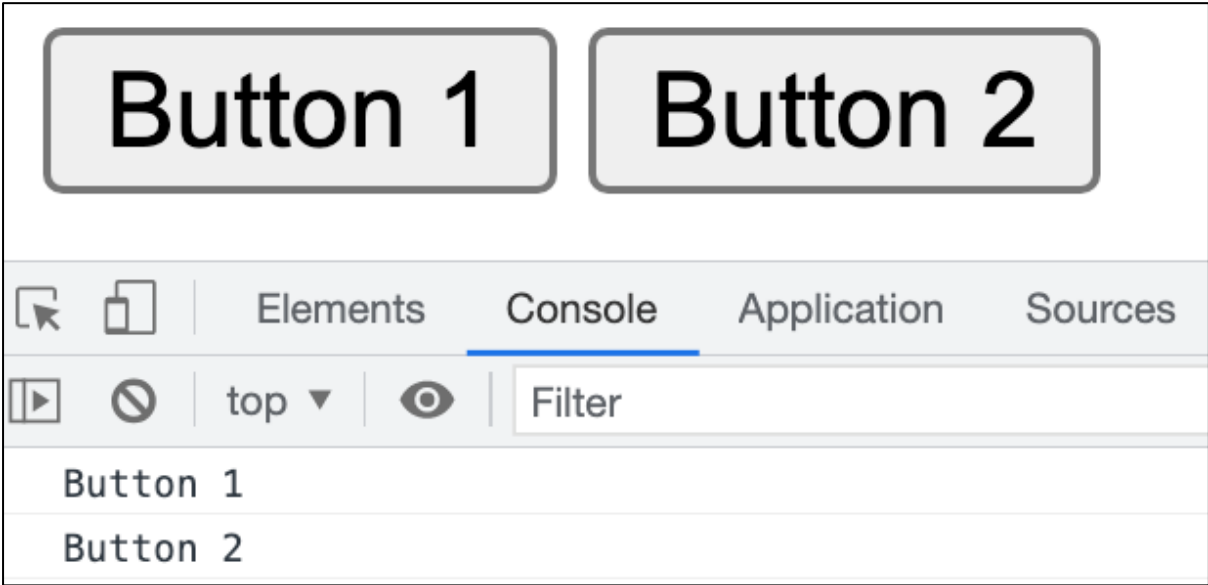


The screenshot shows the Chrome DevTools interface with the following components:

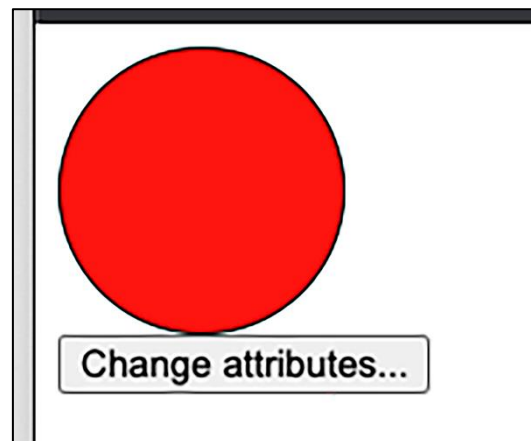
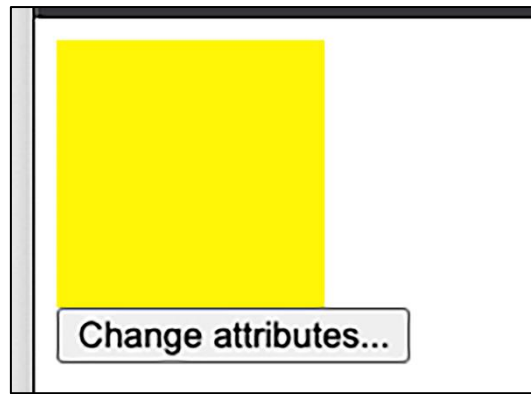
- Top Bar:** Contains icons for navigation and tabs labeled "Elements", "Console", "Sources", "Network", "Performance", "Memory", "Application", "Security", "Lighthouse".
- Breadcrumbs:** Shows the current location as "top".
- Filter:** A search bar containing the word "filter".
- Default levels:** A dropdown menu currently set to "No Issues".
- Console:** Displays the command `> console.dir(document)` and its output. The output is a tree view of the `document` object, listing various DOM-related properties and their values.

```
> console.dir(document)
#document {
  URL: "https://www.packtpub.com/"
  activeElement: body.cms-home.cms-index-index.page-layout-1column
  adoptedStyleSheets: []
  alinkColor: ""
  all: HTMLAllCollection(1289) [html, head, div#powrIframeLoader, style, script, script, script, script, script, sc...
  anchors: HTMLCollection []
  applets: HTMLCollection []
  baseURI: "https://www.packtpub.com/"
  bgColor: ""
  body: body.cms-home.cms-index-index.page-layout-1column
  characterSet: "UTF-8"
  charset: "UTF-8"
  childElementCount: 1
  childNodes: NodeList(2) [<!DOCTYPE html>, html]
  children: HTMLCollection [html]
  compatMode: "CSS1Compat"
  contentType: "text/html"
  cookie: "_hj_id=70170fe7-c840-4820-8c0f-0073313d8189; _fbp=fb.1.1615153032582.417556243; _gcl_au=1.1.830873.1615153033; _...
  currentScript: null
  defaultView: Window {0: global, 1: Window, 2: global, 3: global, 4: global, window: Window, self: Window, document: docum...
  designMode: "off"
  dir: ""
  doctype: <!DOCTYPE html>
  documentElement: html
}
```

Chapter 10: Dynamic Element Manipulation Using the DOM







## My Friends Table

Laurence	1
Mike	2
John	3
Larry	4
Kim	5
Joanne	6
Lisa	7
Janet	8
Jane	9

Add a number

34

4

30

98

93

Maaike

Add Friend

1 Laurence 4

2 Mike 6

3 John 1

4 Larry 1

5 Maaike 4

## Chapter 11: Interactive Content and Event Listeners

Hi there!

Welcome Maaïke van Putten

Bubbling events

1

2

3

4

5

1

2

3

4

5

5

4

5

3

4

5

2

3

4

5

1

2

3

4

5

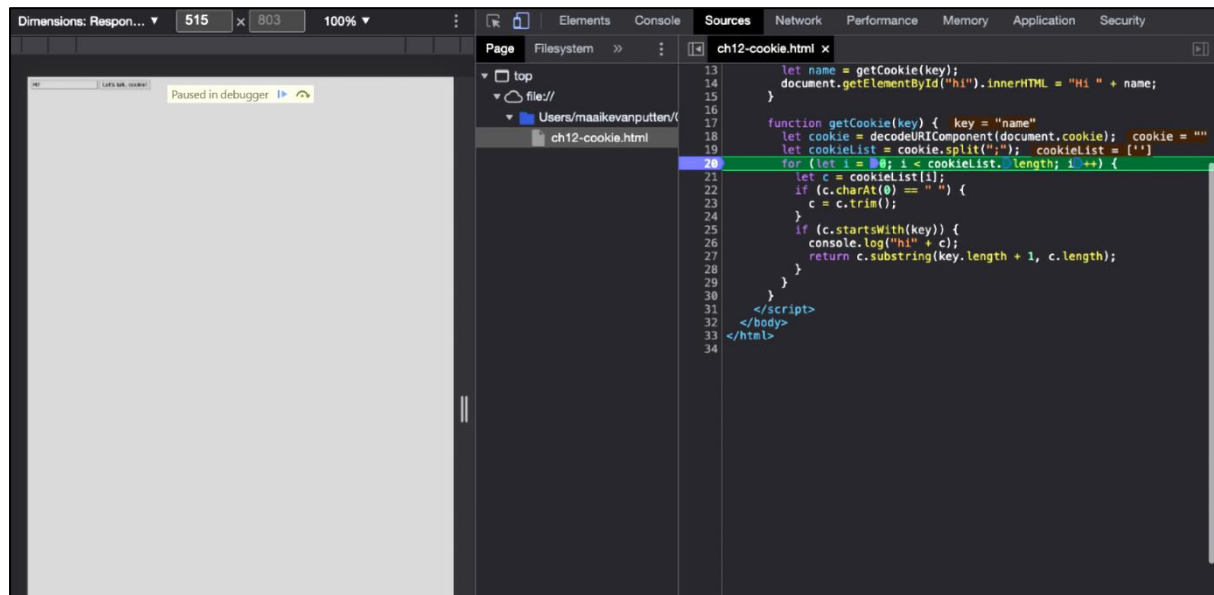
>

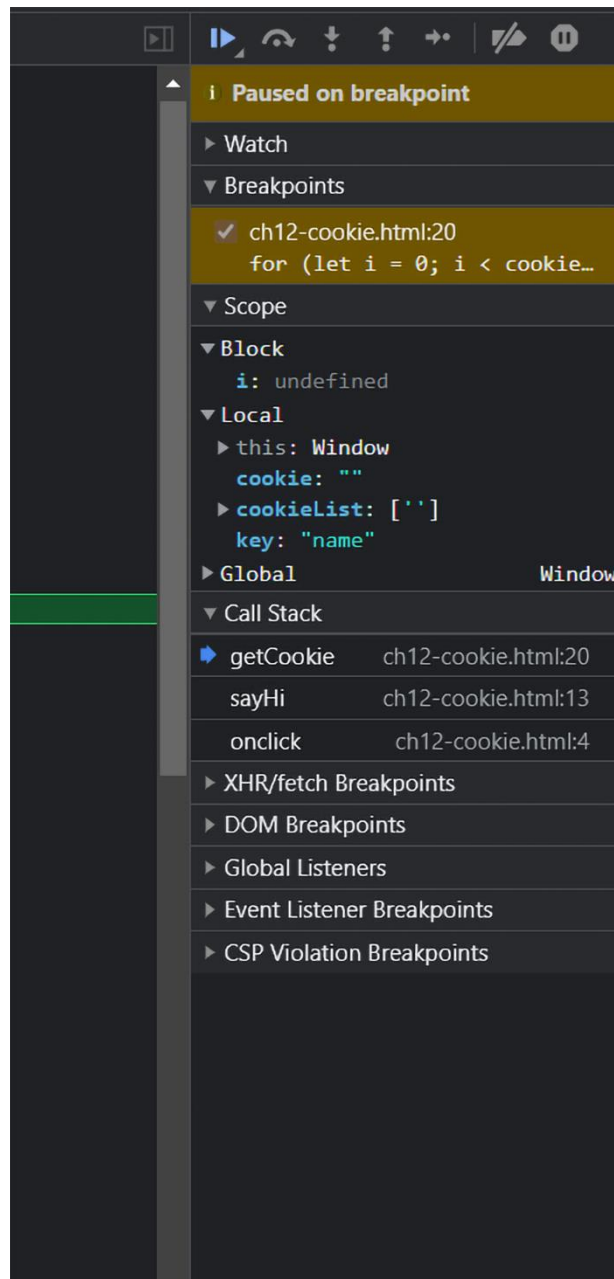
1
2
3
4
5
2
3
4
5
3
4
5
4
5
5
>



You Rated this 3 stars

## Chapter 12: Intermediate JavaScript

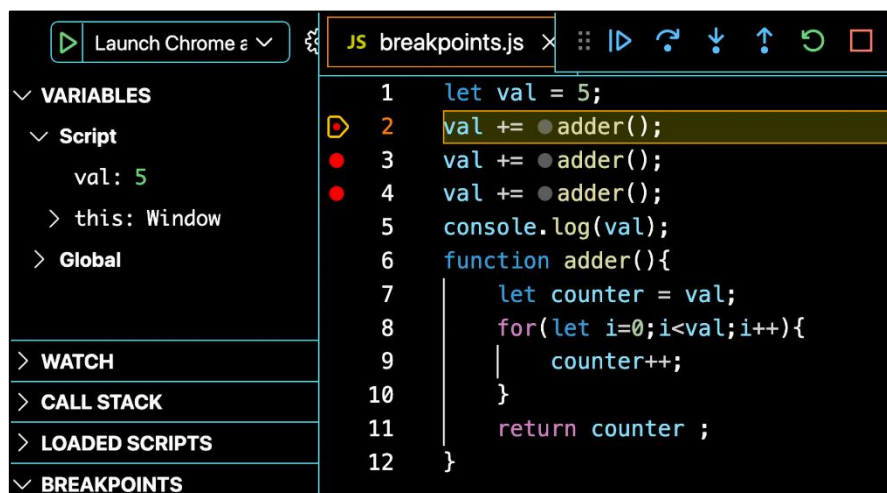
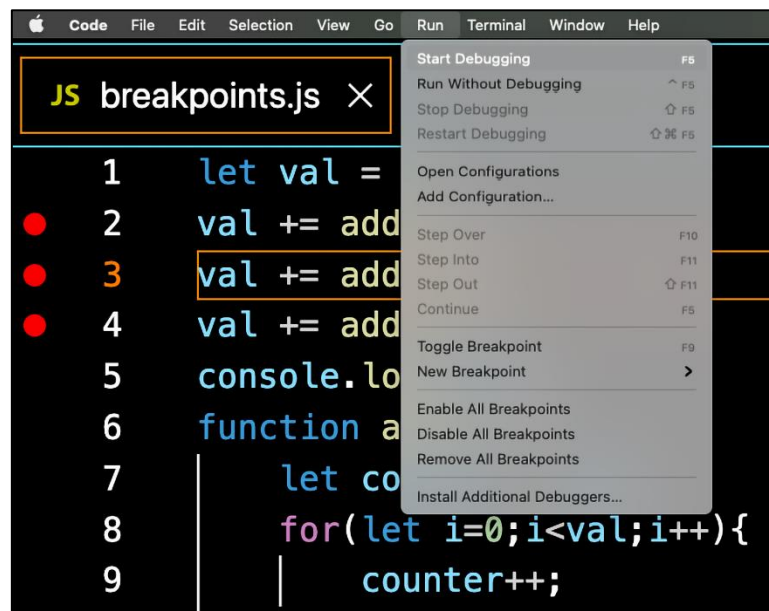




```

1    let val = 5;
2    val += adder();
3    val += adder();
4    val += adder();
5    console.log(val);
6    function adder(){
7        let counter = val;
8        for(let i=0;i<val;i++){
9            counter++;
10       }
11       return counter ;
12   }

```





```
JS breakpoints.js x [debugger icons]
1 let val = 5;
2 val += adder();
3 val += adder();
4 val += adder();
5 console.log(val);
6 function adder(){
7     let counter = val;
8     for(let i=0;i<val;i++){
9         counter++;
10    }
11    return counter ;
12 }
```

```
JS breakpoints.js x [debugger icons]
1 let val = 5;
2 val += adder();
3 val += adder();
4 val += adder();
5 console.log(val);
6 function adder(){
7     let counter = val;
8     for(let i=0;i<val;i++){
9         counter++;
10    }
11    return counter ;
12 }
```

Launch Chrome ε

▼ VARIABLES

> WATCH

> CALL STACK

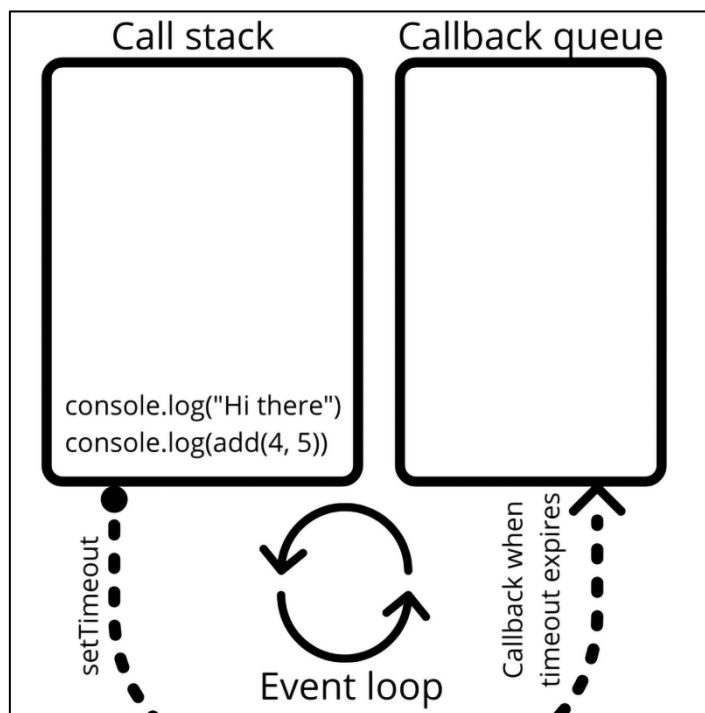
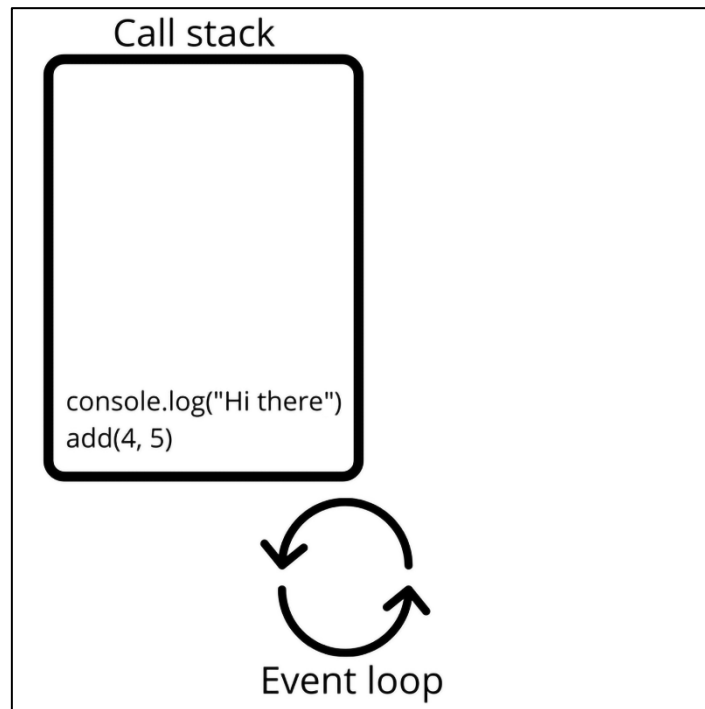
▼ BREAKPOINTS

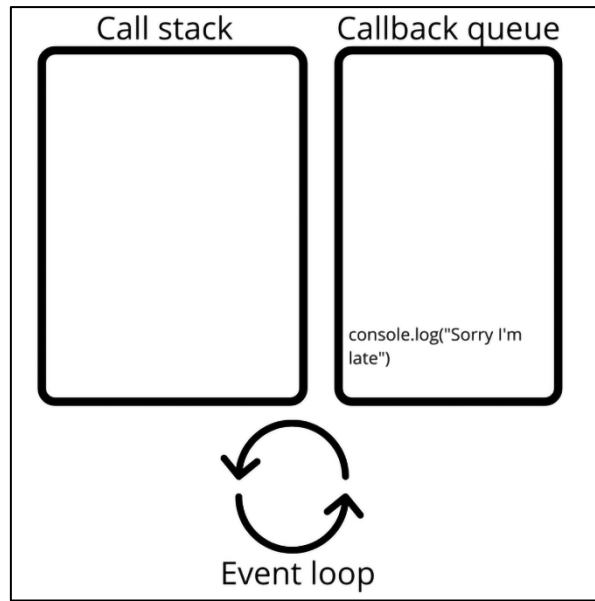
☐ Caught Exceptions

JS breakpoints.js x

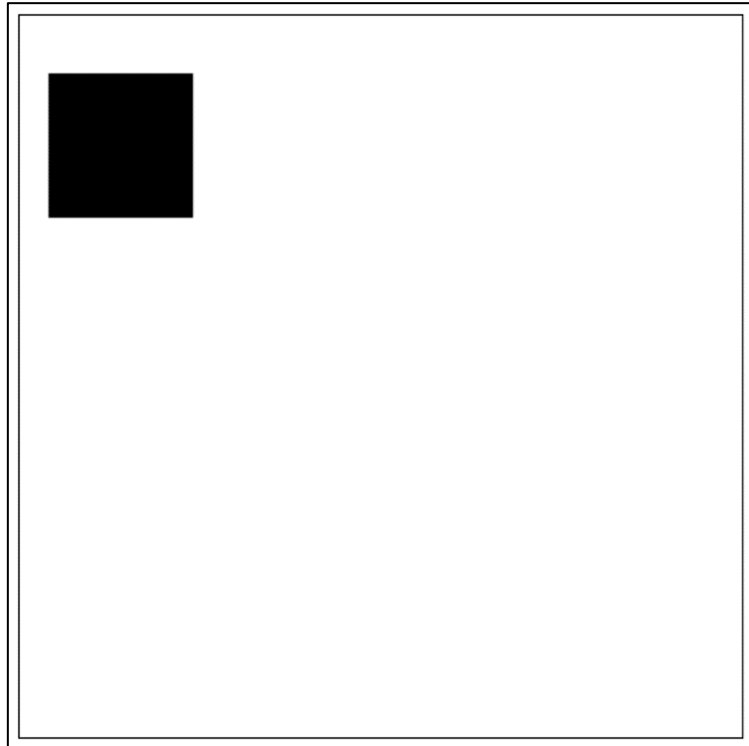
```
1 let val = 5;
2 val += adder();
3 val += adder();
4 val += adder();
5 console.log(val);
6 function adder(){
7     let counter = val;
8     for(let i=0;i<val;i++){
9         counter++;
10    }
11    return counter ;
12 }
```

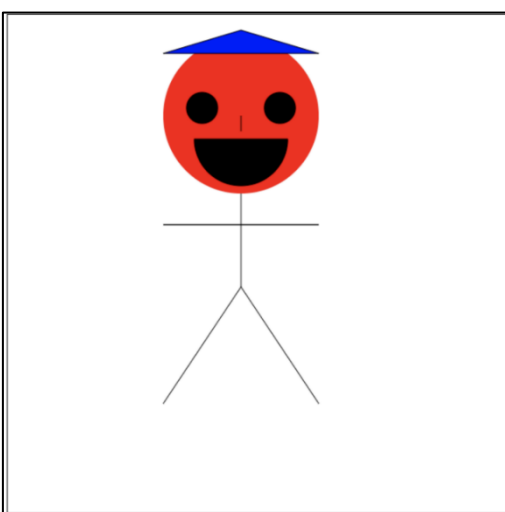
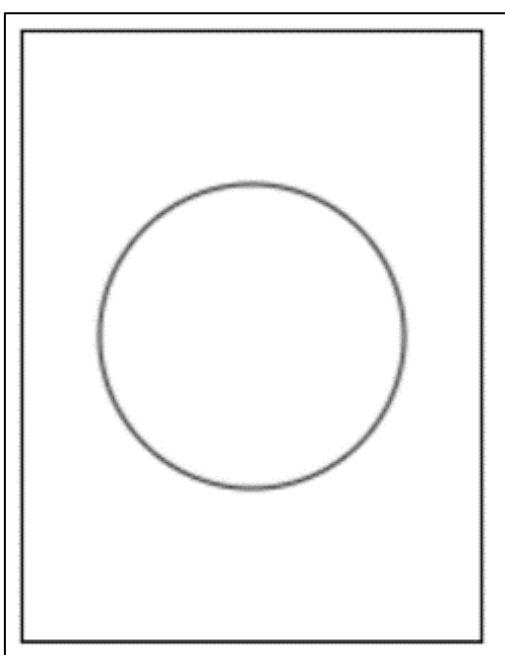
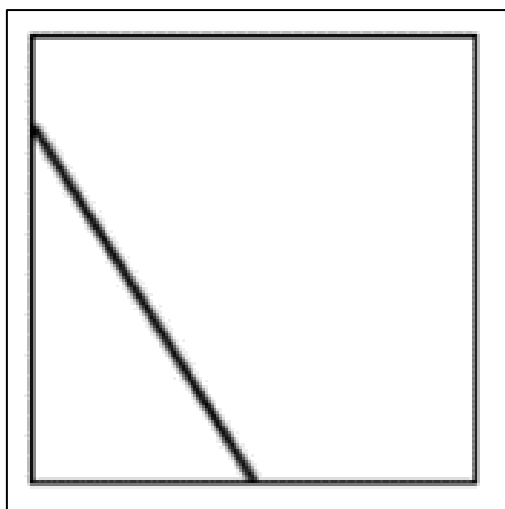
## Chapter 13: Concurrency





## Chapter 14: HTML5, Canvas, and JavaScript





Hi canvas!

*Hello World*

counter:1

counter:2

counter:3

counter:4

counter:5

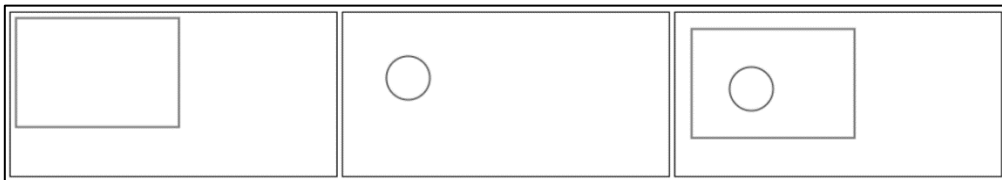
counter:6

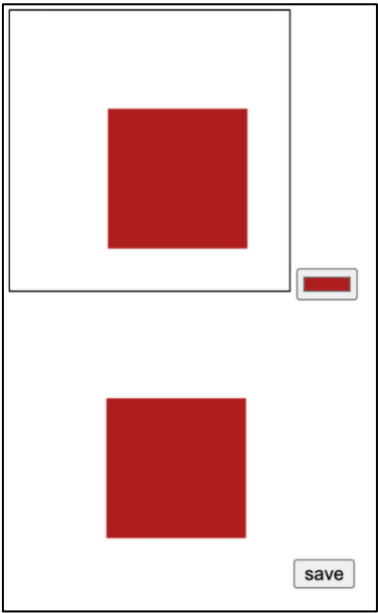
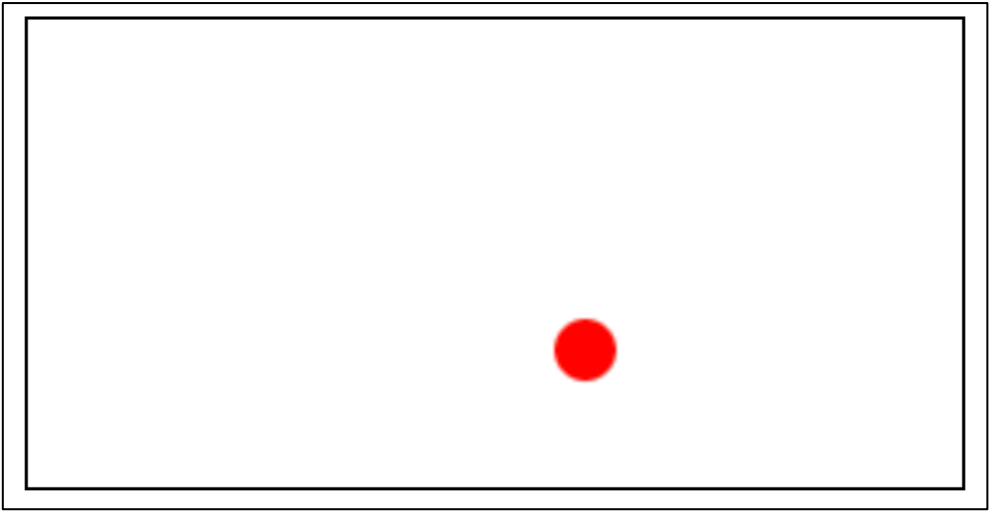
counter:7

counter:8

counter:9

counter:10







## Chapter 15: Next Steps

Let's play a game!

Of hide and seek...

I'm easy to find!

Great idea

Found you!

# Appendix: Practice Exercise, Project, and Self-Check Quiz Answers

(index)	0	1	2	3	4	5	6
0	1	2	3	4	5	6	7
1	8	9	10	11	12	13	14
2	15	16	17	18	19	20	21
3	22	23	24	25	26	27	28

▼ Array(4) **1**

- ▶ 0: (7) [1, 2, 3, 4, 5, 6, 7]
- ▶ 1: (7) [8, 9, 10, 11, 12, 13, 14]
- ▶ 2: (7) [15, 16, 17, 18, 19, 20, 21]
- ▶ 3: (7) [22, 23, 24, 25, 26, 27, 28]

length: 4

▶ [[Prototype]]: Array(0)

< undefined

(index)	0	1	2	3	4	5	6	7
0	1	2	3	4	5	6	7	8
1	9	10	11	12	13	14	15	16
2	17	18	19	20	21	22	23	24
3	25	26	27	28	29	30	31	32
4	33	34	35	36	37	38	39	40
5	41	42	43	44	45	46	47	48
6	49	50	51	52	53	54	55	56
7	57	58	59	60	61	62	63	64

▼ Array(8) **1**

- ▶ 0: (8) [1, 2, 3, 4, 5, 6, 7, 8]
- ▶ 1: (8) [9, 10, 11, 12, 13, 14, 15, 16]
- ▶ 2: (8) [17, 18, 19, 20, 21, 22, 23, 24]
- ▶ 3: (8) [25, 26, 27, 28, 29, 30, 31, 32]
- ▶ 4: (8) [33, 34, 35, 36, 37, 38, 39, 40]
- ▶ 5: (8) [41, 42, 43, 44, 45, 46, 47, 48]
- ▶ 6: (8) [49, 50, 51, 52, 53, 54, 55, 56]
- ▶ 7: (8) [57, 58, 59, 60, 61, 62, 63, 64]

length: 8

▶ [[Prototype]]: Array(0)

< undefined

>

(index)	0	1	2	3	4	5	6	7	8	9
0	0	0	0	0	0	0	0	0	0	0
1	0	1	2	3	4	5	6	7	8	9
2	0	2	4	6	8	10	12	14	16	18
3	0	3	6	9	12	15	18	21	24	27
4	0	4	8	12	16	20	24	28	32	36
5	0	5	10	15	20	25	30	35	40	45
6	0	6	12	18	24	30	36	42	48	54
7	0	7	14	21	28	35	42	49	56	63
8	0	8	16	24	32	40	48	56	64	72
9	0	9	18	27	36	45	54	63	72	81

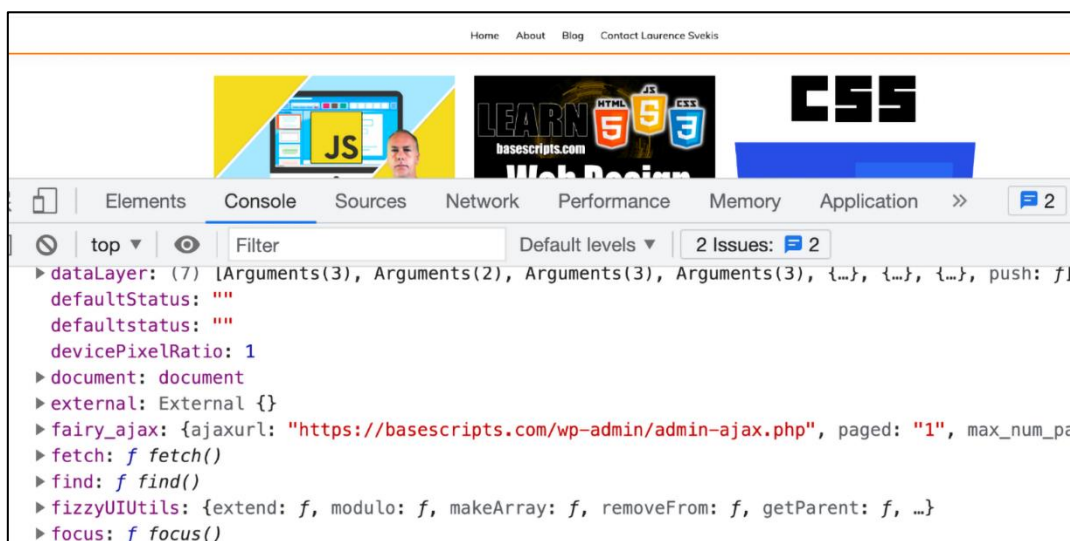
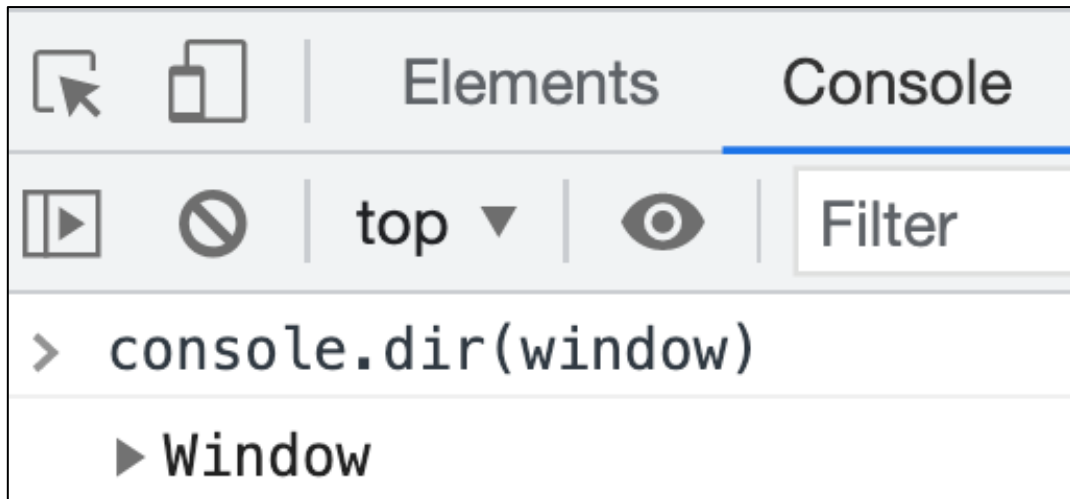
▼ Array(10) **1**

- ▶ 0: (10) [0, 0, 0, 0, 0, 0, 0, 0, 0, 0]
- ▶ 1: (10) [0, 1, 2, 3, 4, 5, 6, 7, 8, 9]
- ▶ 2: (10) [0, 2, 4, 6, 8, 10, 12, 14, 16, 18]
- ▶ 3: (10) [0, 3, 6, 9, 12, 15, 18, 21, 24, 27]
- ▶ 4: (10) [0, 4, 8, 12, 16, 20, 24, 28, 32, 36]
- ▶ 5: (10) [0, 5, 10, 15, 20, 25, 30, 35, 40, 45]
- ▶ 6: (10) [0, 6, 12, 18, 24, 30, 36, 42, 48, 54]
- ▶ 7: (10) [0, 7, 14, 21, 28, 35, 42, 49, 56, 63]
- ▶ 8: (10) [0, 8, 16, 24, 32, 40, 48, 56, 64, 72]
- ▶ 9: (10) [0, 9, 18, 27, 36, 45, 54, 63, 72, 81]

length: 10

▶ [[Prototype]]: Array(0)

< undefined



```
> console.dir(document)
  ► #document
< undefined
> document.body.children
< ▼ HTMLCollection [div.main] ⓘ
  ► 0: div.main
    length: 1
  ► [[Prototype]]: HTMLCollection
> document.body.children[0].children[0]
< ► <div>...</div>
> document.body.children[0].children[0].nextSibling
< ► #text
```