

CodeAlong: D3

Loading D3

The “normal” version:

```
<script src="https://d3js.org/d3.v5.js"></script>
```

The “minified version”:

```
<script src="https://d3js.org/d3.v5.min.js"></script>
```

Beginning Tutorial Page:

<https://d3js.org/#introduction>

1. Add circles to the page via data binding:

NB: This is a slideshow on eClass!

d3_exp1.html

library.js

(version 1: normal function syntax)

(version 2: arrow syntax)

Code by hand. Build the HTML and add the library.

2. Move a circle.

Not on eClass.

d3_transition.html

transition_library.js

Attach function as event listener to the pre-existing **<button>** on the page.

3. More customized behaviour — toggle the page background:

Not on eClass.

d3_intro.html

my_d3_library.js

Add the library. Let's build a transition first:

```

/*
Transition Library for D3 Day One
*/

/* GLOBAL VARIABLES */
background = 'white';
foreground = 'black';

/* Add an event handler */

d3.select('button')
  .on('click', change_page);

function change_page() {
  /* appeal to our global variables */
  if (background == 'white') {
    background = 'black';
    foreground = 'white';
  } else {
    background = 'white';
    foreground = 'black';
  }

  d3.select('body')
    .transition()
    .style('background-color', background)
    .style('color', foreground);
}

```

Randomly Colour Paragraphs:

```

d3.selectAll("p").style("color", function() {
  return "hsl(" + Math.random() * 360 + ", 100%, 50%)";
});

```

Transition a background color:

(In the console, we need to put this all on one line, it seems, otherwise, we return an object.)

```

d3.select('body').transition().style('background-color', 'black').style('color', 'white')

```

Put data into Paragraphs:

```
d3.select("body")  
  .selectAll("p")  
  .data([4, 8, 15, 16, 23, 42])  
  .enter().append("p")  
  .text(function(d) { return "I'm number " + d + "!"; });
```

Add paragraphs to a doc;
Add mouseover events (blue class?)

Work with data files.