

Week 3 D3

1. D3 can access elements from the DOM by: `d3.select("#idname")`. Select only gets the first element with that id or tagname.
`selectAll` can access all elements with a specific tagname. The difference with javascript is that now the elements can immediately mutated, with js it was necessary to loop over every elements.
2. The "d" in the function is basically the input for the function. It is called "d" by convention. "i" is the second argument of the function, and if an array is passed as an argument, i represents the index of the element in the array or list.

3. <

```
// in javascript div element
var div = document.createElement("div");
div.className = "barChart1";
// creates two bars
div.innerHTML = "<div style='width: width in px;'></div>
<div style='width: width in px;'></div>";
document.body.appendChild(div);
```

```
// in d3 div element
Var data_arr = [10, 20];
var body = d3.select("body").append("div").attr("class", "barChart1");
d3.select("body").selectAll(".barChart1").data(data_arr).enter().append("div").style("width",
function(d){return d + "px";})
```

4. With these methods it becomes possible to alter data. With `selectAll`, the elements are selected, with `update` they can be altered, with `enter` and `append` new nodes can be entered into the DOM. `Exit` removes nodes from the dom.
5. With HTML and svg the process of drawing a barchart is more complicated since it is difficult to access and add specific elements. Whereas with d3 it is easy to add new elements.