

Questions Dataprocessing Week 3

1. How can D3 access and change the DOM? What do select and selectAll do?

For example by using the select or selectAll methods.

The select method returns the first element that matches the clause, selectAll returns all the elements that matches the clause.

2. What are the d and i in function(d){ } and function(d, i){ }?

The d in function(d) refers to bound data.

The i in function(d, i) refers to the index of the element within its selection. (iteration)

3. Write sample lines of JavaScript to add a div element with class "barChart1" and to add an svg element with class "barChart2" with square dimensions.

```
var barChart1 = d3.select("div").append("barChart1");
```

```
svg.selectAll("square").append("barChart2")  
.attr("width", "200")  
.attr("height", "200")
```

4. Describe append, update, enter, and exit at a high level. What does "selectAll + data + enter + append" refer to?

append; insert new class

update; update a class

enter; combine data

exit; stop

function refers to a way to append new class to an existing class.

5. What are the main differences between drawing a bar chart with HTML and SVG?

Drawing a bar chart in HTML is doable for small datasets, but you have to write its style manually. With SVG we can bind data, such that we can assign attributes of the bar chart faster.

6. In drawing the simple bar chart with D3 and SVG, what elements were appended, and what parts of the graph did these elements correspond to?

texts => corresponds to data

rectangles => corresponds to value of the data