

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

D3 takes the first element when you just select, but when you select all d3 takes all the elements you call by the same name.

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

The d is for the associated data with a given selection. In the second function i stands for the index.

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 $barchart = $('.barchart');
    $('#barchart1')
    .append('<div id="id' +
        ($barchart.length + 1) +
        '" class="barchart">...</div>')
    <rect class="jimmy" id="p5" x="200" y="200" width="100" height="100" />
```

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

Append is adding to some code. Update persistent elements, staying on stage.

Enter adding node slot manually. Exit is to exit the nodes.

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

For svg and html use different tools. Svg elements can be inspected with the development tool.

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?

Data was appended for the length of the bars and the axis.