

1. How can D3 access and change the DOM? What do `select` and `selectAll` do?
It can access elements by the name of these elements and change them by using `select` or `selectAll`.

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

it's nothing but a convention. We can call it anything. `d` is standard fare in d3 code because that's the writing style of Mike Bostock, the author of the framework and of many of its examples.

Here, `i` (or anything we want to call it, as long as it's the 2nd argument of this function) represents the order of the element in the selection, so the first gets a 0, the second a 1, etc. (well, in our example it goes to 3 elements, so the last one gets a 2)

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.

```
d3.select("body").append("svg").attr("width", "50").attr("height", "50");
```

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

enter - incoming elements, entering the stage

update - persistent elements, staying on stage.

exit - outgoing elements, exiting the stage

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

Whereas HTML is largely limited to rectangular shapes, SVG supports powerful drawing primitives like Bézier curves, gradients, clipping and masks.

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?

Chart, bar x and y axis.