## **Questions**

- How can D3 access and change the DOM? What do select and selectAll do?
  - By using the above mentioned queries (select/selectAll)
  - o "select" selects the first element of the chosen type/class from the dom
  - o "selectAll" selects all elements of the chosen type/class from the dom
- What are the d and i in function(d){} and function(d, i){}?
  - o d is the data/object that accompanies it
  - o i is the amount of objects it has iterated over. Think of it as a for-loop system.
- 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.
  - o d3.select("body").append("div").attr("class", "barChart1")
  - o d3.select("body").append("svg").attr.("width", 50).attr("height", 50)
- Describe append, update, enter, and exit at a high level. What does "selectAll + data + enter + append" refer to?
  - Append adds a new object to the page (inside a list)
  - Update, also called transition, allows objects to transform, changing their appearance/colour etc.
  - Enter creates the initial join of data to elements, creating one circle element for every data element in the array.
  - Exit allows you to remove unneeded objects
  - O This refers to >Selecting all objects, adding data to them, entering said data and appending extra objects if there is more data than objects
- What are the main differences between drawing a bar chart with HTML and SVG?
  - SVG is more dynamic, has more functions and possibilities, is easier to manipulate (once you know what you're doing) and is overall more powerful
- 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?
  - o Rects where added, these represented the actual bars.
  - A path was added, this represented my x-axis