

Questions homework D3:

1. How can D3 access and change the DOM? What do select and selectAll do?
D3 accesses and change the DOM by binding data to specific DOM elements. Select selects usually the first DOM element of a certain type and executes the specific modification indicated on them. With selectAll you can select all elements and its children with a certain tag and execute the change on them.
2. What are the d and i in function(d){} and function(d, i){}?
D and i are variables that should be given to the function whenever it is called.
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 div = document.createElement("div");  
document.body.appendChild(div);  
d3.select("body").append("p").attr("class", "barChart1");  
Var svg = document.createElement("svg");  
document.div.appendChild(svg);  
d3.select("div").append("svg").attr("class", "barChart2", width="420", height="120");
```
4. Describe append, update, enter and exit at high level. What does selectAll + data + enter + append refer to?
Append means that it adds something behind a specified element. Update means that the changes, removed or added elements become executed. Enter creates one new element for every unmatched data item. Exit selects data items so they can be changed. selectAll + data + enter + append refers to the action where all corresponding html tags are select and the data is entered and added to these html tags.
5. What are the main differences with drawing a chart with HTML and SVG?
The main differences is that charts with SVG are scalable and HTML charts are not.
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?
The elements that were appended were body, svg and g. These elements were corresponding to the placement, the element where the graph is drawn and