Data Modeling for Systems Development - Assignment 2 **Niloofar Mansoor**

Step1_a:

Using D3 creates a learning curve for the developer as they may not be familiar with how to use the library. The code is much easier to maintain and extend, and the developed might have to make minor changes to extend the code compared to when they're not using the library.

Step3:

Using the native javascript DOM methods made it easier to create the chart for someone who is not familiar with D3. But accessing the dynamically created elements and add visualisation elements to them was not as simple as D3. For instance, when I tried to create onmouseover events for all the bars, I ran into a lot of issues and I ended up defining all the onmouseover events for all the created bar elements. It's not efficient in practice. The other way was to use CSS to add these visualisation elements, but since I wanted to show the corresponding population to each state and it needed to be coded in JavaScript I did not use CSS. Implementing a tooltip and positioning it was also more difficult compared to D3. It is also easier to read a tsv file in D3, as there are already methods in the library to help with that.

Overall, using D3 might not be easy and there is a learning curve to it, but the visualisation options in the D3 library give the developer a lot more freedom and helps with their creativity, and help them maintain and extend their code more efficiently.