Creative Coding Part 2 – Report

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One of the approaches that I made is using a map(); function and the map(); function in p5.js is used to normalize a number having range from min1 to max1 in a range of min2 to max2. So the function would look something like this,

let newValue = map(value, 0, 100, 0, 80);

So in this example it would scale the ‘value’ from the number between 0 to 100, to a range of 0 and 80.

I used this function for the vertical bar chart to scale the data, so the function would scale the number from the number between 0 to maxValue, to a range of 0 and chartHeight. So the function would look something like this,

ScaleData(num) { return map(num, 0, this.maxValue, 0, this.chartHeight); }

Similarly I used the same function for a scatter plot chart, and since I want to scale both the x-axis and the y-axis, I made separate functions for scaling data, one for the x-axis and one for the y-axis.

Another approach that I took which is probably one of the most common approaches that I took since it is so useful is the translate. The translate basically translates the x and y coordinates to the new origin position from the Canvas. For example if the sketch looked like this,

translate(30, 70);  
rect(0, 0, 50, 50);

the rectangle would start drawing from the new origin position. So instead of the starting position of 0, 0 it would actually start drawing from 30, 70.