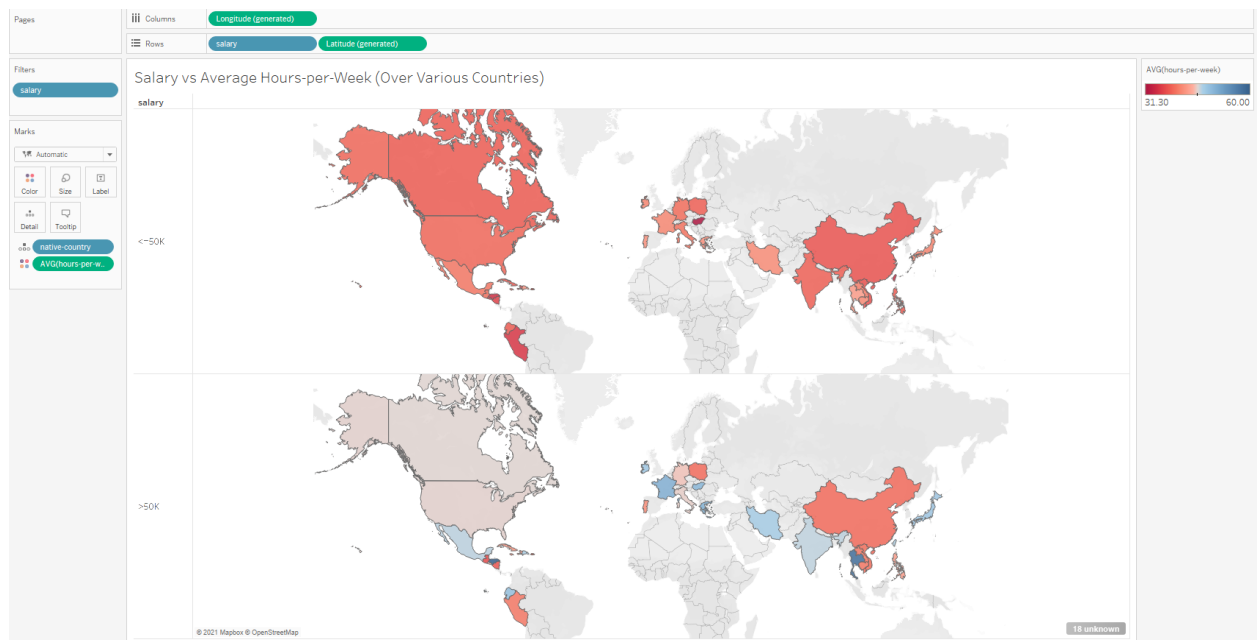


Homework 4

- 1) This first graph is a cartogram that shows the relationship between the average hours-per-week and the salary. I wanted to take advantage of the fact that our data has a native-country field so that it can open up more options to the different charts I can use. I organized the chart by splitting it into two where the top section is $\leq 50K$ and the bottom section is $>50K$. I used color to distinguish the average hours-per-week where shades closer to red were below the total average hours (46.65 hours) and shades of blue meant that the hours were above the average. It is interesting that the chart tells us that all countries that earn $\leq 50K$ all work less than the average hours-per-week and China (38.90 hours) averages well underneath the total average hours while still earning more than 50K.



- 2) For this next graph, our data was not very good for showing any patterns across a time period so I elected to use the native-country field to my advantage again. This time I studied the differences in age and the different salaries. I understand that this visualization looks very similar to the one I used for question 1 but since the data is not particularly suited for finding patterns across time and one of my other teammates is doing a scatterplot for this problem, I felt that using a cartogram would be a good way to convey a different story than in question 1. The way I set up this visualization was very similar to question 1 but I wanted to use a different color scheme so that they can appear more distinct. The chart seems fairly predictable in which the older someone is, the more likely their salary would be higher than that of a younger person. One thing I did find interesting was that Hungary was the only country that was colored red, which means

that they had the highest average age. Another interesting piece that I found from the chart is that some of the Southern America countries (Peru, Nicaragua, and Guatemala) had near identical average age ranges when comparing their salary as well as having average ages of at least 8 years below the total average age of 43.

