## Matthew Avallone Mini Project 1

## Visualization 1

In visualization 1, I chose to use a grouped bar chart to show the amount each country received and donated. Comparing amounts between countries is simple because all you have to do is read the heights of the bars. To distinguish between the two subcategories, I used color to encode whether the bar was for a donated amount or received amount. One thing I do not like with this visualization is that a few countries skewed the scale for the bar chart. This makes is hard to read the amounts when they were less than ten billion dollars. I felt that even with this issue, it does not prevent a user from answering the questions posed for visualization 1, since they do not ask for specific amounts from the dataset.

## Visualization 2

In visualization 2, I chose to use two geographical maps to distinguish the amounts donated and received by world region. The questions posed for this visualization focused on seeing where commitment amounts clustered for the two categories. In my original hand sketch, I tried implementing a single map that showed the net value each country contributed on a diverging color scale. After clarification that we were interested in seeing each individual commitment category, I changed my design to use a second map for solving the tasks by encoding the amount donated or received with the color of the country. I believe this allows for easily seeing which regions receive and donate the most.

## Visualization 3

In visualization 3, I present two different visualizations that attempt to answer the questions posed. My original hand sketch was a heat map that encoded the amount received for every country using area. After creating that design in D3, I was unhappy with the clarity of the the visualization because a couple values skewed the scale of the rectangles. Then I created a second heat map, this time using color to encode the amount received for each country. I think using color is superior in this case since area requires physical space on the screen, and enlarging/spreading out the rectangles too much would make it difficult to read. Color also makes the high values pop out, which helps to answer the tasks quicker. Overall, I feel that neither approach is perfect for answering both of the questions but they work reasonably well.