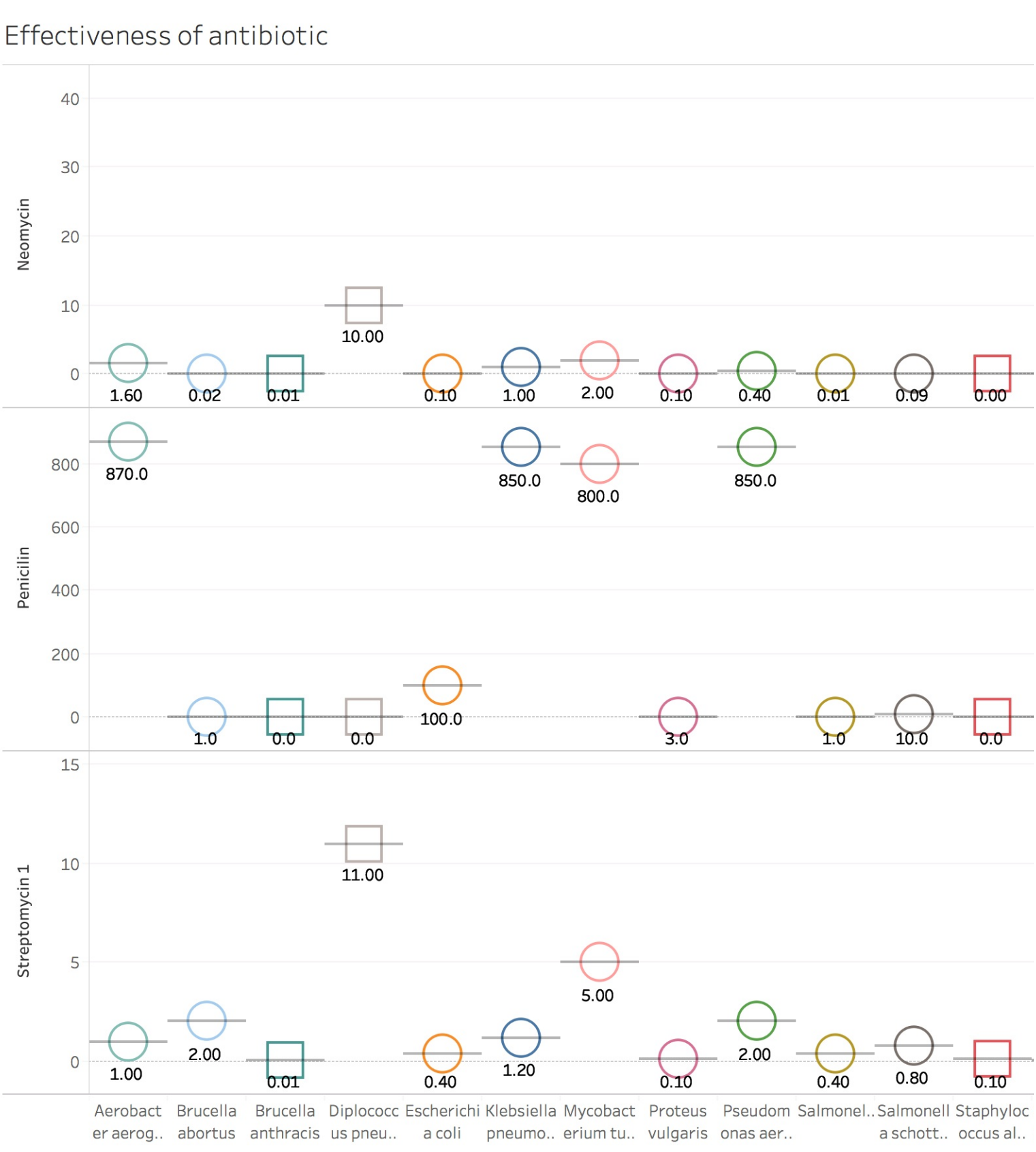
visualzation



The dataset contains 6 variables, including name of antibiotics, name of bacteria, effectiveness of Penicillin, effectiveness of Streptomycin, effectivenss of Neomycin and Gram Staining. There are 2 nominal data and 3 quantitative data.

I think the most important parts of the dataset are the quantitative effectiveness of 3 antibiotics over different bacteria. Therefore I used 3 stacked barchart. Having 3 graphs stacked together allows audience see effectiveness and difference of 3 antibiotics over same bacteria. But barchart is not very effective in this case as there are some extreme outliers in the dataset that will make the scale of bar too large to see those smaller values. In order to reduce that problem, I changed the barchart to dot plot, using the position of the circle to represent numeric vaule. To further make the graph readable, I added numberic label and a line to help audience to see value. For the name of bacteria, I used color to distinguish different bacteria. Also at the bottom there's label of bacteria name.

There's another dismeion: gram staining. This is a nominal with only 2 possible value: negative or positive. I used shape to distinguish the two type: square for positive, circle for negative. On the top right I put the legend of gram staining in case audince is confused.