Data Visualization 5 Matthew Kurnia
1. (Source code)
2. (Source code)
3. (Source code)
4.

1	FALSE	Hue may also convey categories.
2	FALSE	Though unlikely, there may be clashes in the keys (two people having the same first and last name).
3	FALSE	We can (for example) show that the heights of people are distributed normally just by looking at the height attribute.
4	FALSE	We can show a spectrum of fully saturated colors, or not have the gray point in the middle, or not have fully saturated colors at all.
5	TRUE	No reason for it to be otherwise.
6	FALSE	Spatial data is perhaps more appropriate, but if the tabular data has shapes encoded in them then there "comparing shapes" may be ok.
7	TRUE	The addition of a correlation line may aid the visualization but seeing the flow of points is sufficient.
8	FALSE	Position on common scale is the most accurate.
9	FALSE	One may be able to use 6-8 buckets?
10	FALSE	Size and colour are also fully separable.
11	FALSE	The human perceptual system is good at delivering absolute judgements for the hue channel and relative judgements for the saturation and luminance channels.
12	TRUE	We can easily tell from the gradient whether something is going up or down relative to an axis.
13	TRUE	Reordering may help with clustering.
14	TRUE	Radial layouts can visually join the start and end of cyclic data, hence more correctly representing it than other forms of layouts.
15	FALSE	Color and size channels are separable.
16	FALSE	It is good because the human perceptual system is good at absolute judgement of the hue channel. Also may not work for colorblind users.
17	FALSE	It is quite difficult to judge quantitative values from a rainbow colormap.
18	TRUE	Colorblindness effect people's ability to perceive hue. So when we encode attribute x with hue and attribute y with luminance, a colorblind person may not be able to distinguish the values of x.
19	TRUE	Blue-orange colormaps are generally good for colorblind accessibility, and having extra redundancy in luminance is a plus.