

## Styling options, pie charts, heatmaps and more

Use the data in *basketball\_players\_data.csv*

You need to create 7 charts and add your answers to Part 8:

1. Create a bar chart that shows how many distinct players are at each position (*Pos.x*).
  - a. Hide the *Pos.x* label.
  - b. Update the y-axis label (the numeric axis)
  - c. Have the counts show next to each bar. Now we don't need the grid or y-axis anymore.
  - d. Remove the grid.
  - e. Remove the y-axis.
  - f. Use aliases to write the category names
    - i. C = Center
    - ii. PG = Point Guard
    - iii. SG = Shooting Guard
    - iv. PF = Power Forward
    - v. SF = Small Forward
  - g. Sort the bars by height
  - h. Choose one or two bars to highlight and change that bars' color. What color combination will work best.
  - i. Update the title
  - j. Do we need a legend.
2. Create a pie chart that shows how many distinct players are at each position (same as above but a pie chart).
  - a. What happened to the colors? How do we resolve it?
  - b. By each slice, show the position, the number of players. These are labels.
  - c. Show the number of players as a percentage of the total. This is done with a *quick table calculation*.
3. Duplicate the pie chart and change the colors to a sequential palette associated with the player count. How should the colors be arranged?
  - a. Sort the data.
  - b. Does anything look odd? How can we fix it?

Now we'll explore *heatmaps*, *highlight tables*, *treemaps*, and *packed bubbles charts*. It is standard that all 4 of these charts require 2 categorical variables and 1 numeric variable.

We'll use the number of points scored by colleges over the last 10 years (the years will be treated as categories in this case). Select the draft years starting from 2014 through 2023. Use the following colleges – Alabama, Arizona, Connecticut, Duke, Houston, Iowa State, Kansas (obviously), North Carolina, Purdue and Tennessee.

4. Create a *highlight table* to show the number of points scored by each of the selected colleges for each of the 10 years.
5. Duplicate the *highlight table* from Step 4 and convert it to a *heatmap* using *Show Me*.
6. Duplicate the chart again and convert it to a *treemap*.

7. Duplicate it again and convert it to a *packed bubbles chart*.
8. **Think about which of the four charts you like the best and which you like the least. Rank them. Explain why you chose this ranking. You can include your answers in the submission text box or attach a text file with your answers. Try to edit the charts to improve their appearance. For example, see if adding labels helps.**

**Submit:**

1. the .twbx file
2. your answer to part 8.