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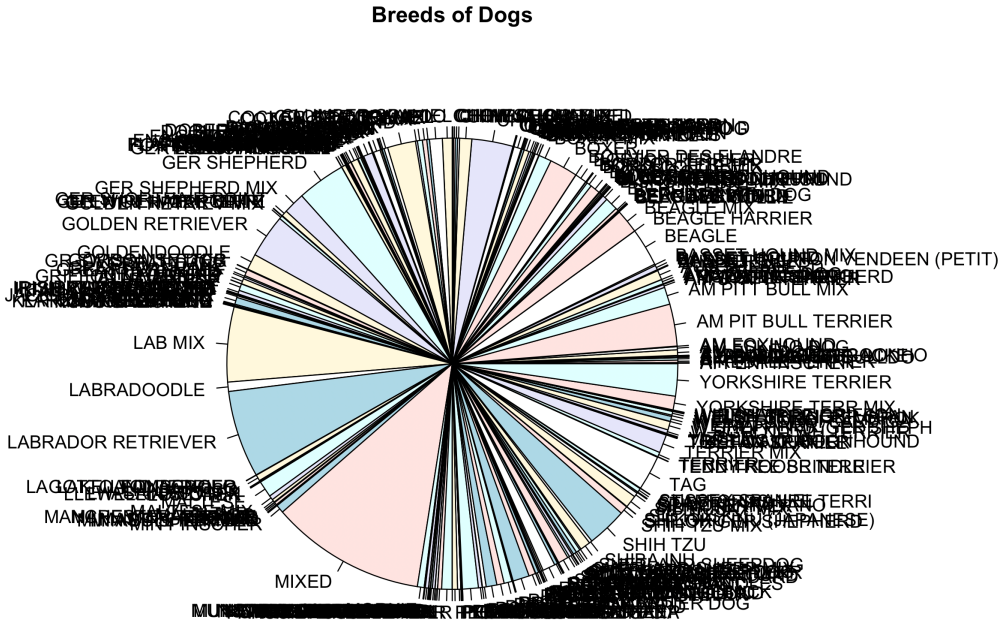
Module 6 Exercise: Pie Charts

i. **The entire R code used when creating the pie chart in (1)**

```
library(plyr)
dog<-read.csv("dogbreeds2017.csv")
breedcount<-count(dog, "Breed")
pie(breedcount$freq, main="Breeds of Dogs", labels=breedcount$Breed)
```

ii. **Screenshot of the pie chart created in (1)**



iii. **A list of problems/weaknesses you see with this pie chart.**

- **Overlapping Labels**: Many labels are overlapping, making it impossible to read the names of the dog breeds.
- **Too Many Slices**: There are too many slices in the pie chart, which makes it difficult to differentiate between them and understand the distribution effectively.
- **Lack of Clarity**: The chart lacks clarity and simplicity, which are crucial for quickly conveying information.

iv. **A list of actions you could incorporate to reduce the identified problems/weaknesses**

- **Reduce Overlap**: Increase the chart size or decrease the font size of labels to reduce overlap. Alternatively, use a legend or an interactive tooltip that displays the breed name when hovered over or clicked.

- **Simplify**: Consider grouping smaller categories into a single 'Other' category or use a bar chart for better comparison between categories.
- **Enhance Readability**: If the pie chart is necessary, provide additional charts or tables that list the breeds and their corresponding values to ensure all information is accessible.

v. The entire R code used when creating the pie chart in (4)

```
breedcount500<-subset(breedcount, breedcount$freq >= 500)
pie(breedcount500$freq, main="Breeds of Dogs (at least 500 per breed)",
labels=breedcount500$Breed)
```

vi. Screenshot of the pie chart created in (4)