ggPlot-Facets

i ggPlot-facets

- 1. facet_wrap (x, ncol)
- 2. facet_grid (x,y, ncol, nrows)

library(tidyverse)

Data

```
head(iris)
```

```
Sepal.Length Sepal.Width Petal.Length Petal.Width Species
          5.1
                      3.5
                                   1.4
                                               0.2 setosa
1
2
          4.9
                      3.0
                                   1.4
                                               0.2 setosa
3
          4.7
                      3.2
                                   1.3
                                               0.2 setosa
          4.6
                                   1.5
                                               0.2 setosa
4
                      3.1
5
          5.0
                      3.6
                                   1.4
                                               0.2 setosa
          5.4
                      3.9
                                   1.7
                                               0.4 setosa
```

In order to do facet plot across variables Sepal.Length, Sepal.Width, Petal.Length and Petal.Width, we need to reshape the data to pivot_longer.

```
Species Sepal.Length Sepal.Width Petal.Length Petal.Width
1 setosa
                  5.1
                              3.5
                                           1.4
                                                       0.2
2 setosa
                  4.9
                              3.0
                                           1.4
                                                      0.2
3 setosa
                  4.7
                              3.2
                                           1.3
                                                      0.2
```

```
      4 setosa
      4.6
      3.1
      1.5
      0.2

      5 setosa
      5.0
      3.6
      1.4
      0.2

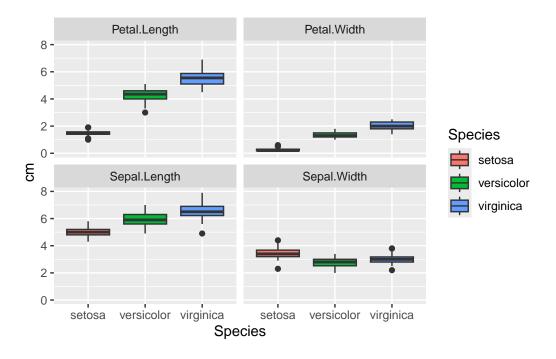
      6 setosa
      5.4
      3.9
      1.7
      0.4
```

```
iris_long <- irisA %>%
  pivot_longer(
  !Species,
  names_to = "Leaves",
  values_to = "cm")
head(iris_long)
```

facet_wrap

- wraps a 1-d ribbon of panels into 2-d
- to specify number of columns (ncol=3) or number of rows (nrow=2) in a panel layout.

```
p <- ggplot(iris_long, aes(x=Species, y=cm))+
  geom_boxplot(aes(fill=Species))
p+facet_wrap(~Leaves, ncol=2)</pre>
```



facet_grid

• produces 2-d grid of panels defined by variables for rows and columns.

```
q <- ggplot(iris_long, aes(x=Species, y=cm))+
  geom_boxplot(aes(fill=Species))
q + facet_grid(cols = vars(Leaves))</pre>
```

