04: Adding tidyverse

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Chunk: setup

```
opts_chunk$set(fig.path="04_figures/")
knit_hooks$set(
    chunklabel=
        function(before, options, envir) {
            if(before && options$chunklabel)
                sprintf(
                    "\\chunklabel{%s}", options$label)
        })
opts_chunk$set(chunklabel=TRUE)
```

Here we add 'tidy' packages [1, 2].

Let us add some libraries. We need `message=FALSE` since `tidyverse` has a habit of polluting messages with too cute symbols...

Chunk: libraries

```
library(tidyverse)       # The Swiss Army knife of data processing
library(ggthemes)        # A better look for plots
theme_set(theme_tufte())
```

Now we can plot iris data set a little better:

Chunk: dataTransormation

```
iris <- as.tibble(iris)
iris
```

```
## # A tibble: 150 x 5
##    Sepal.Length Sepal.Width Petal.Length Petal.Width Species
##           <dbl>       <dbl>        <dbl>       <dbl> <fct>
##  1          5.1         3.5          1.4         0.2 setosa
##  2          4.9         3            1.4         0.2 setosa
##  3          4.7         3.2          1.3         0.2 setosa
##  4          4.6         3.1          1.5         0.2 setosa
##  5          5           3.6          1.4         0.2 setosa
##  6          5.4         3.9          1.7         0.4 setosa
##  7          4.6         3.4          1.4         0.3 setosa
##  8          5           3.4          1.5         0.2 setosa
##  9          4.4         2.9          1.4         0.2 setosa
## 10          4.9         3.1          1.5         0.1 setosa
## # ... with 140 more rows
```

On the second figure we set —echo=FALSE—: compare the results!

References

[1] Hadley Wickham. *ggplot2: Elegant Graphics for Data Analysis*. Springer-Verlag New York, 2009.

[2] Hadley Wickham. *tidyverse: Easily Install and Load the 'Tidyverse'*, 2017. R package version 1.2.1.

Chunk: Sepal

```
ggplot(iris) + geom_point(aes(Sepal.Length, Sepal.Width,
                              color=Species))
```

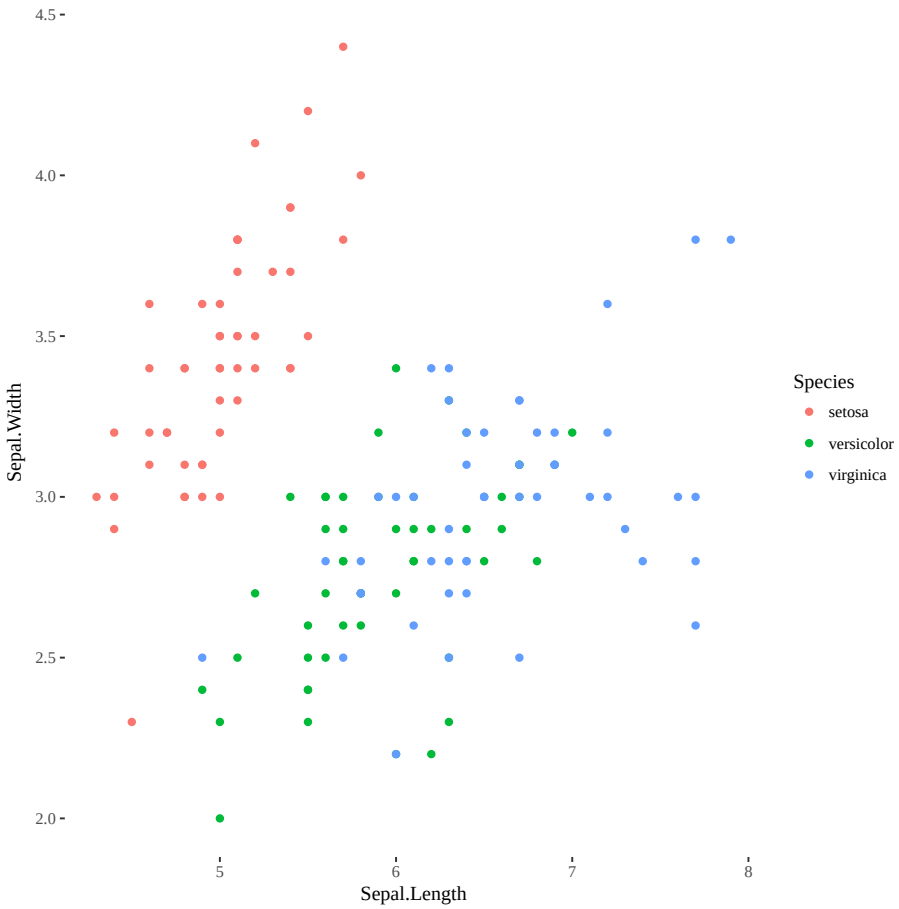

Figure 1: Sepal dimensions of iris

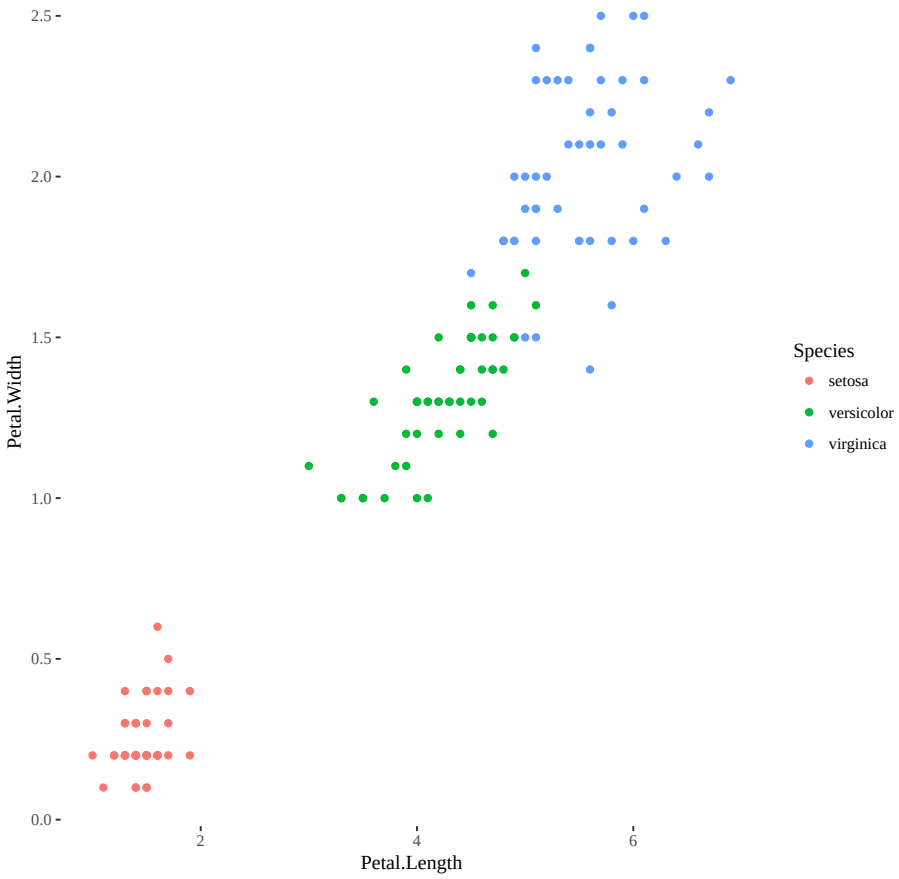

Figure 2: Petal dimensions of iris