SIMPLE SWEAVE USAGE EXAMPLE:
ANALYSIS OF FISHER'S IRIS DATA

BERD REPRODUCIBLE RESEARCH WORKING GROUP

The famous (Fisher's or Anderson's) iris data set gives the measurements in centimeters of the variables sepal length and width, and petal length and width, respectively, for 50 flowers from each of 3 species of iris. The species are *setosa, versicolor, virginica.*

First, let's run a simple ANOVA comparing the sepal lengths of the three species.

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            Df Sum Sq Mean Sq F value    Pr(>F)
Species      2 63.212  31.606  119.26 < 2.2e-16 ***
Residuals  147 38.956   0.265
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

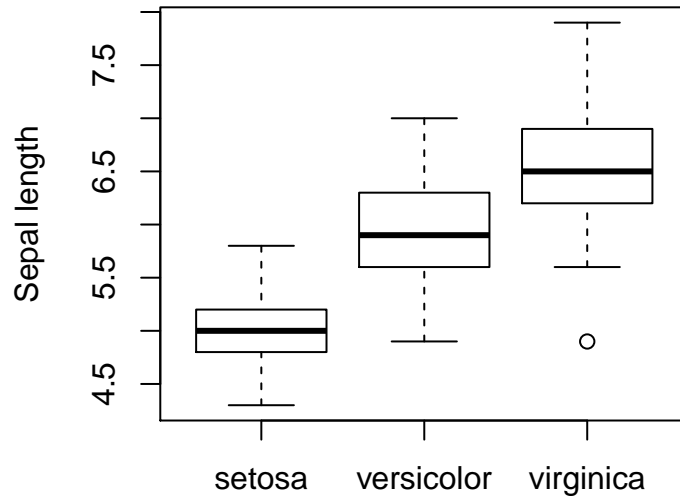We can see that the three species have significantly different sepal lengths. Figure 1 shows the corresponding boxplot.

FIGURE 1. Boxplot of sepal lengths by species.