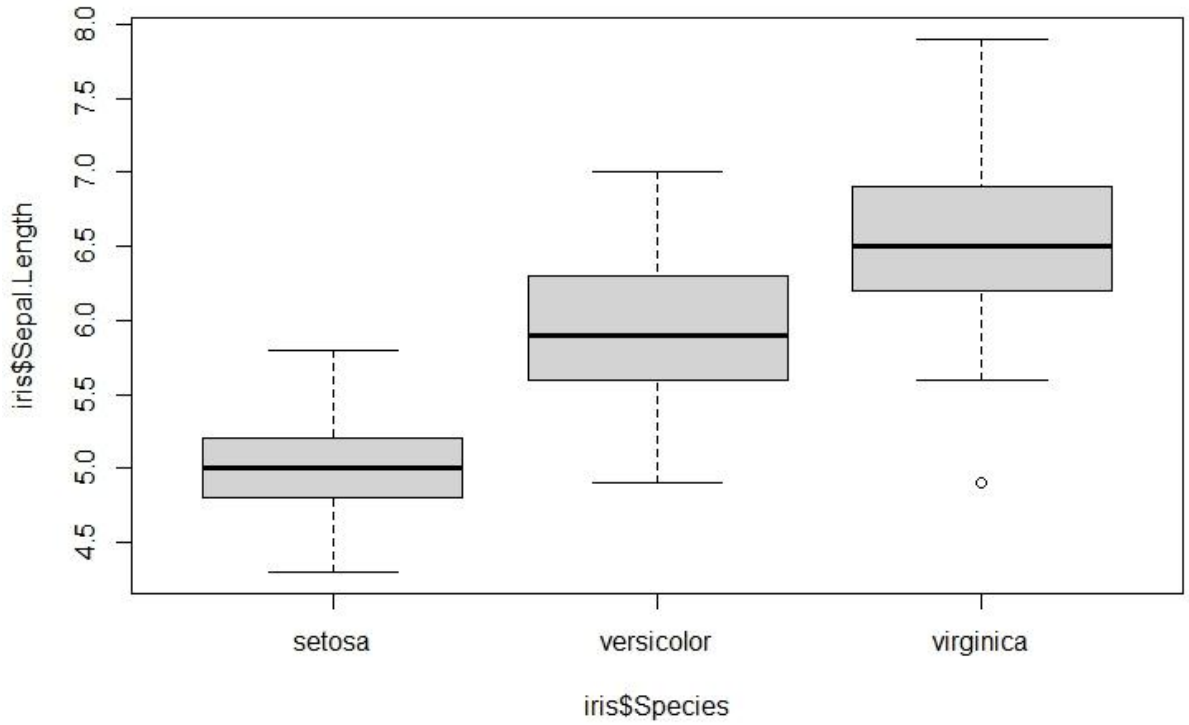
1. Setosa
2. ~5cm
3. 5.006 cm
   setosa <- subset(iris, Species == "setosa")
   mean(setosa$Sepal.Length)
4. 

5. Yes, they meet the criteria for normality. The p-value for the shapiro test is above the alpha level, allowing us to reject the null hypothesis that the data is non-normally distributed.

6. Yes, we determined that a linear model is appropriate for this data. The relationship between the values is linear and has normally distributed residuals.

7. ~2.23 cm

8. 4*2.23 = ~8.92cm

9. Yes, this model meets the criteria for normality. The p-value for the shapiro test is above the alpha level, allowing us to reject the null hypothesis that the data is non-normally distributed.