Lab 4
Stat 427

Fall 2020

Instructions

Complete all questions. To prepare for the randomly collected lab, follow the instructions on the class website to prepare the work for submission. These submission rules will apply to all labs throughout the semester.

Basic Graphs

(1) Copy and paste the provided code for a dataset called `PlantGrowth` and variables `weight` and `group`. It is a dataset from an experiment to compare yields (as measured by dried weight of plants) obtained under a control and two different treatment conditions. Create the following graphs:
   (a) `weight`: one-variable stripchart (no grouping)
   (b) `weight`: one-variable stemplot
   (c) `weight`: one-variable boxplot (no grouping)
   (d) `weight`: one-variable histogram
   (e) `weight`: side-by-side boxplots by the `group` variable
   (f) `group`: barplot of the group variable
   (g) `weight`: barplot of weight means by group (see Module 4 for example on subsetting)

```
data(PlantGrowth)
group=PlantGrowth$group
weight=PlantGrowth$weight
```

(2) For the following chemical compounds, create bar graphs and pie charts that depict the percent composition by molar mass of each chemical element in the compound. You will need to do some research on your own to find the chemical compositions and such needed. The function for percent composition constructed in Module 3 will help.
   (a) Adenosine
   (b) Guanine
   (c) Cytosine
   (d) Thymine