# Homework 3: Solutions

*Amy Allen & Dayne Filer*

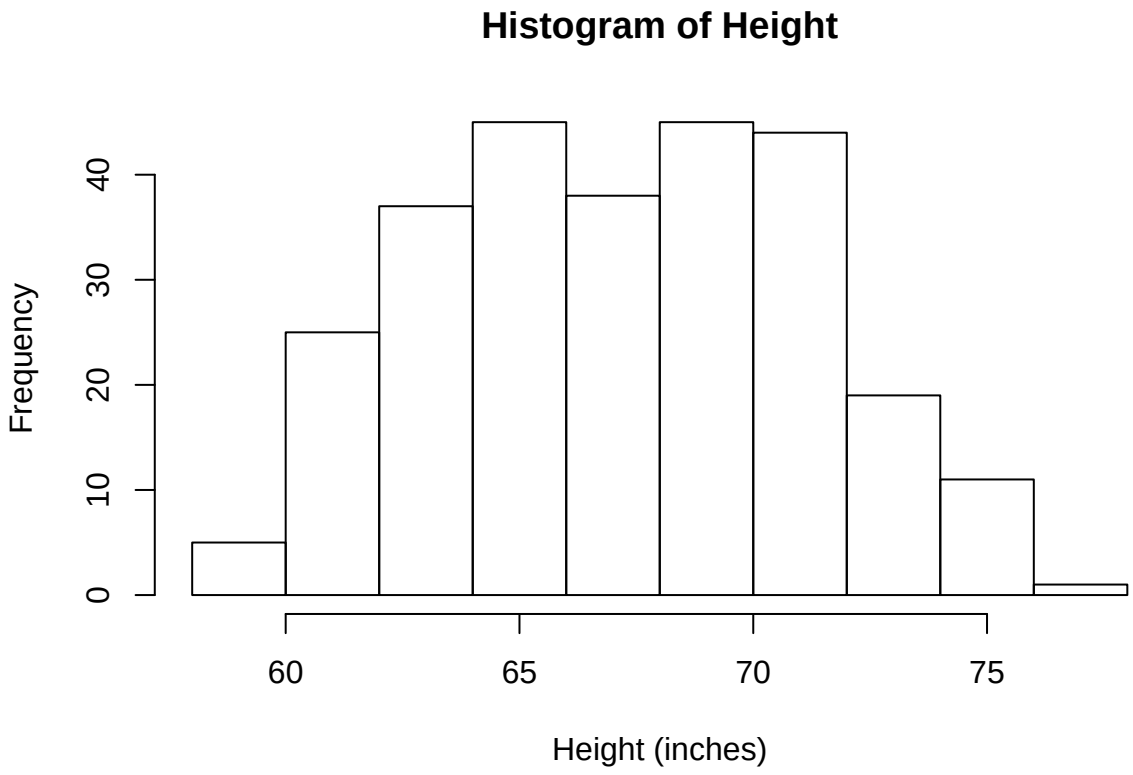
*June 28, 2016*

Load data:

```
setwd("~/Documents/rclass")
data <- read.csv("heights.csv", header = TRUE)
```

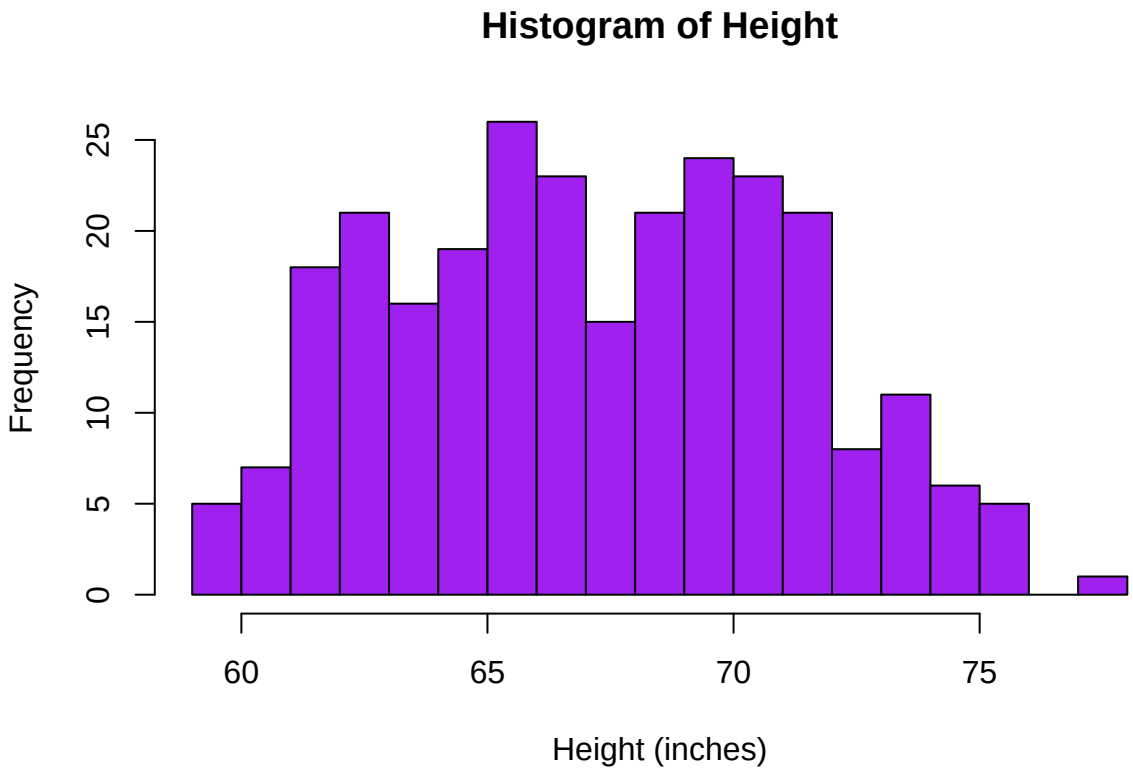
1. Make a histogram of height using the `hist()` function. Include an appropriate title and axis labels.

```
hist(data$Height,
     xlab = "Height (inches)",
     ylab = "Frequency",
     main = "Histogram of Height")
```



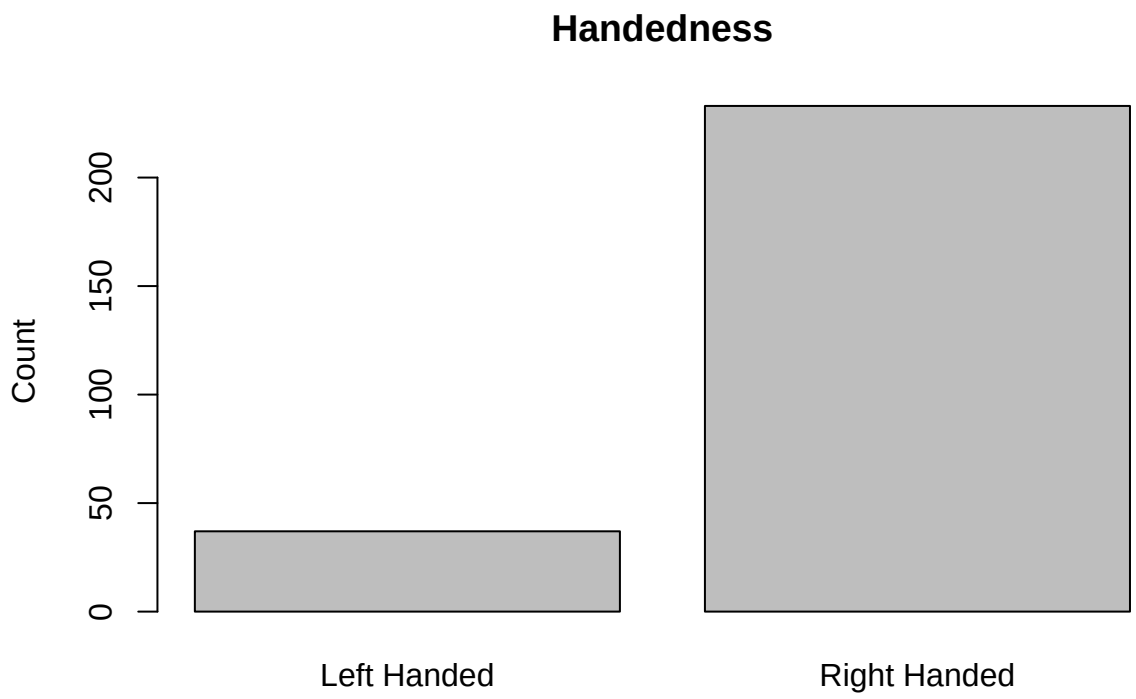
2. Now make the same histogram but include 20 bins and make it your favorite color.

```
hist(data$Height, xlab = "Height (inches)",
     ylab = "Frequency",
     main = "Histogram of Height",
     breaks = 20,
     col = "purple")
```



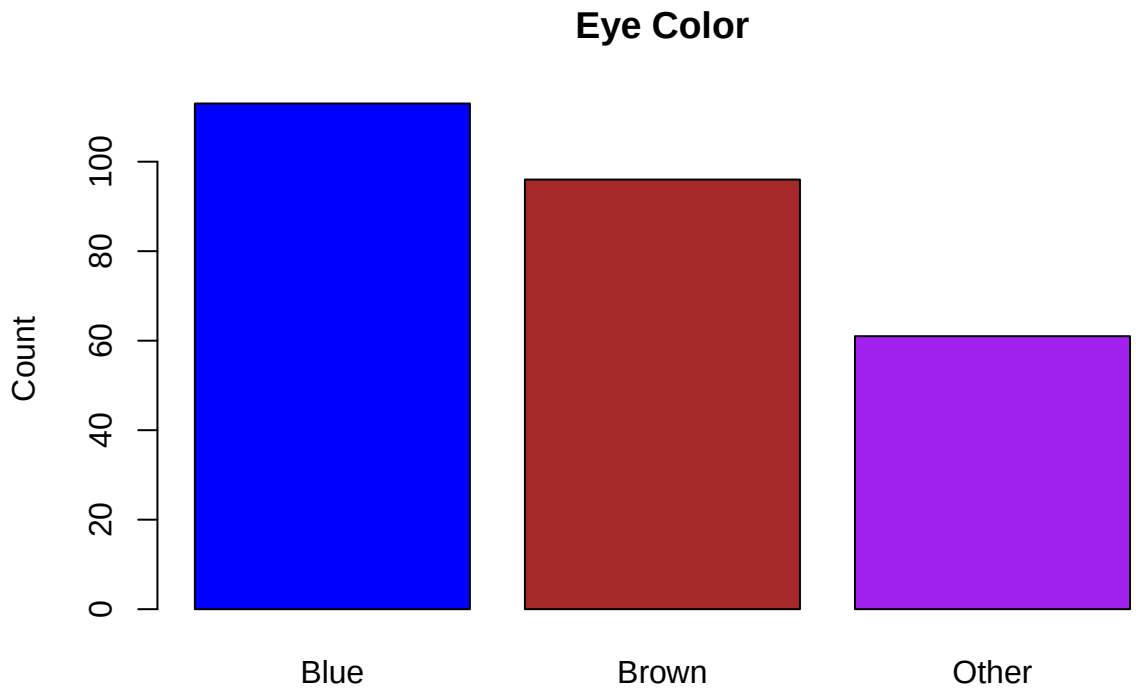
3. Make a bar chart of how many people are left or right handed using the `barplot()` function. Hint: `data$Handedness[data$Handedness=="Left"]` will return a vector including on those entries where `data$Handedness` is `"Left"` and `length()` will return the length of a vector.

```
barplot(height = c(length(data$Handedness[data$Handedness =="Left"]),
                   length(data$Handedness[data$Handedness =="Right"])),
        names.arg = c("Left Handed","Right Handed"),
        ylab = "Count",
        main = "Handedness")
```



4. Make a bar chart of how many people have the following eye colors: blue, brown, other. Make the color of each bar correspond to the eye color (you can choose any color for other).

```
barplot(height = c(length(data$Eye.Color[data$Eye.Color == "Blue"]),
                   length(data$Eye.Color[data$Eye.Color == "Brown"]),
                   length(data$Eye.Color[data$Eye.Color == "Other"])),
        names.arg = c("Blue","Brown","Other"),
        ylab = "Count",
        main = "Eye Color",
        col = c("blue","brown","purple"))
```



5. Make a box plot of the height using the `boxplot()` function.

```
boxplot(x = data$Height,
        ylab = "Height (inches)",
        main = "Boxplot of Height")
```