ECON 282 Assignment 3

(1) Read in data on superbowl ads for this assignment.
> sb_ads <- read.csv("assign3_data.csv", header = TRUE)

(2) Reformat the column multi (which records whether a brand has received the best superbowl ad award multiple times) to be read as strings and not as a factor variable
> sb_ads$multi <- as.character(sb_ads$multi)

(3) Recode the . (missing data) into N's:
> sb_ads$multi2 <- ifelse(sb_ads$multi==".", "N", sb_ads$multi)

(4) Create a histogram.
> hist(sb_ads$Ads)

(5) Add in title, labels, correct number of breakpoints etc:
> range <- max(sb_ads$Ads)- min(sb_ads$Ads)
> hist(sb_ads$Ads, breaks = range, main = "Frequncy Distribution of the Number of Superbowl Ads Run", xlim = c(0, 25), xlab = "Number of Superbowl Ads Run")

(6) Let's calculate some conditional means and do a t-test:
> mean1 <- mean(sb_ads$Ads[sb_ads$multi2=="Y"])
> mean2 <- mean(sb_ads$Ads[sb_ads$multi2=="N"])
>t.test(sb_ads$Ads[sb_ads$multi2=="Y"], sb_ads$Ads[sb_ads$multi2=="N"])

(7) In a paragraph, discuss what you do and do not know based on the test in (6).

(8) Think of a different pair of conditional means to test. Try it, and discuss why you did it and what you learned.
(1) Read in data on superbowl ads for this assignment.

```r
> sb_ads <- read.csv("assign3_data.csv", header = TRUE)
```

(2) Reformat the column multi (which records whether a brand has received the best superbowl ad award multiple times) to be read as strings and not as a factor variable

```r
> sb_ads$multi <- as.character(sb_ads$multi)
```

(3) Recode the . (missing data) into N's:

```r
> sb_ads$multi2 <- ifelse(sb_ads$multi==".", "N", sb_ads$multi)
```

(4) Create a histogram.

```r
> hist(sb_ads$Ads)
```

(5) Add in title, labels, correct number of breakpoints etc:

```r
> range <- max(sb_ads$Ads)- min(sb_ads$Ads)
> hist(sb_ads$Ads, breaks = range, main = "Frequency Distribution of the Number of Superbowl Ads Run", xlim = c(0, 25),
          xlab = "Number of Superbowl Ads Run")
```

(6) Let's calculate some conditional means and do a t-test:

```r
> mean1 <- mean(sb_ads$Ads[sb_ads$multi2=="Y"])
> mean2 <- mean(sb_ads$Ads[sb_ads$multi2=="N"])
>t.test(sb_ads$Ads[sb_ads$multi2=="Y"], sb_ads$Ads[sb_ads$multi2=="N"])
```

(7) In a paragraph, discuss what you do and do not know based on the test in (6).

(8) Think of a different pair of conditional means to test. Try it, and discuss why you did it and what you learned.