

R Code for Examples in the book

"Statistics: The Art and Science of Learning from Data" by Agresti, Franklin and Klingenberg, 5th edition

Chapter 10

Example 9: Cell Phone Use – Significance Test Comparing Two Means

Reading in the data

```
data <-
read.csv(file='https://raw.githubusercontent.com/artofstat/data/master/Chapte
r10/cell_phone_reaction_times_long.csv')</pre>
```

To subset data to make the two groups

```
cell <- subset(data, Group == 'Cell')
control <- subset(data, Group == 'Control')</pre>
```

To make a hypothesis test comparing the two means

```
t.test(cell$ReactionTime, control$ReactionTime)

##

## Welch Two Sample t-test

##

## data: cell$ReactionTime and control$ReactionTime

## t = 2.6307, df = 56.696, p-value = 0.01095

## alternative hypothesis: true difference in means is not equal to 0

## 95 percent confidence interval:

## 12.31658 90.87092

## sample estimates:

## mean of x mean of y

## 585.1875 533.5938
```