



R Code for Examples in the book  
*"Statistics: The Art and Science of Learning from Data"*  
 by Agresti, Franklin and Klingenberg, 5<sup>th</sup> edition

## Chapter 8

### Example 11: Flight Departure Delays – Percentile Confidence Interval

#### Reading in the data

```
delays <-  
read.csv(file='https://raw.githubusercontent.com/artofstat/data/master/Chapter7/atl_departure_delay.csv')
```

#### To make 10,000 bootstrap samples and compute each sample mean

```
bootmean <- c()  
for (i in 1:10000) {  
  bootmean[i] <- mean(sample(delays$minutes, replace = TRUE))  
}
```

#### To obtain the 2.5th and 97.5th percentiles of the bootstrapped means

```
quantile(bootmean, c(0.025, 0.975))  
  
##      2.5%      97.5%  
## 62.8400 107.6547
```