



R Code for Examples in the book
“Statistics: The Art and Science of Learning from Data”
by Agresti, Franklin and Klingenberg, 5th edition

Chapter 8

Example 8: Standard Error and Confidence Interval for Population Mean

Reading in sample mean data:

```
xbar <- 2.94  
n <- 1555  
s <- 2.84
```

To compute the standard error

```
se <- s / sqrt(n)  
se  
  
## [1] 0.07202
```

To find the margin of error for a confidence level of 95%

```
zscore <- qnorm(0.975)  
me <- zscore * se  
me  
  
## [1] 0.1411566
```

To compute a 95% confidence interval for the population mean

```
xbar + c(-1, 1) * me  
  
## [1] 2.798843 3.081157
```