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 3: Standard Error for the Difference of Two Sample Proportions

Reading in data for the first proportion

```
x1 <- 347
n1 <- 11535
phat1 <- x1 / n1
```

Reading in data for the second proportion

```
x2 <- 327
n2 <- 14035
phat2 <- x2 / n2
```

To compute the mean of the difference

```
mean <- phat1 - phat2
mean

## [1] 0.006783462
```

To compute the standard error of the difference

```
se <- sqrt((phat1 * (1 - phat1) / n2) + (phat2 * (1 - phat2) / n2))
se

## [1] 0.001923612
```