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

```
x_1 <- 347
n_1 <- 11535
phat_1 <- x_1 / n_1
```

Reading in data for the second proportion

```
x_2 <- 327
n_2 <- 14035
phat_2 <- x_2 / n_2
```

To compute the mean of the difference

```
mean <- phat_1 - phat_2
mean

## [1] 0.006783462
```

To compute the standard error of the difference

```
se <- sqrt((phat_1 * (1 - phat_1) / n_2) + (phat_2 * (1 - phat_2) / n_2))
se

## [1] 0.001923612
```