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

Chapter 6

Example 13: Normal Approximation of the Binomial Distribution

To compute the mean of the binomial distribution

```
mu <- 500000 * 0.554
mu

## [1] 277000
```

To compute the standard deviation of the binomial distribution

```
sigma <- round(sqrt(500000 * 0.554 * (1 - 0.554)))
sigma

## [1] 351
```

To compute an interval of 3 standard deviations within the mean

```
mu + c(-1, 1) * 3 * sigma

## [1] 275947 278053
```