



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

Chapter 11

Example 11: Hero or Criminal – Permutation Test

Reading in data

```
mytable <- as.table(matrix(c(1, 9, 2, 5, 2, 1), nrow = 2, byrow = TRUE,
                           dimnames = list(Status = c('U.S.',
                                                       'International'),
                           Opinion = c('Hero',
                                       'Criminal',
                                       'Neither'))))
```

mytable # viewing the table

```
##              Opinion
## Status      Hero Criminal Neither
##   U.S.             1         9       2
## International      5         2       1
```

To perform a permutation test with 10,000 random permutations

```
chisq.test(mytable, simulate.p.value = TRUE, B = 10000)

##
## Pearson's Chi-squared test with simulated p-value (based on 10000
## replicates)
##
## data: mytable
## X-squared = 6.9318, df = NA, p-value = 0.0341
```