

```

library(tidyverse)

## -- Attaching packages ----- tidyverse 1.3.1 --

## v ggplot2 3.3.5      v purrr  0.3.4
## v tibble  3.1.4      v dplyr  1.0.7
## v tidyr   1.1.3      v stringr 1.4.0
## v readr   2.0.1      v forcats 0.5.1

## -- Conflicts ----- tidyverse_conflicts() --
## x dplyr::filter() masks stats::filter()
## x dplyr::lag()    masks stats::lag()

library(readr)
library(psych)

##
## Attaching package: 'psych'

## The following objects are masked from 'package:ggplot2':
##
##   %+%, alpha

data=read_csv("~/Desktop/204 R/USHOUSE.csv")

## Rows: 4 Columns: 3

## -- Column specification -----
## Delimiter: ","
## chr (1): RELIGION
## dbl (2): USPROP, SEATS

##
## i Use 'spec()' to retrieve the full column specification for this data.
## i Specify the column types or set 'show_col_types = FALSE' to quiet this message.

data

## # A tibble: 4 x 3
##   RELIGION  USPROP SEATS
##   <chr>      <dbl> <dbl>
## 1 Catholic    0.28   117
## 2 Methodist  0.04    61
## 3 Jewish     0.02    30
## 4 Other      0.66   227

chisq.test(data$SEATS,p=data$USPROP)

```

```
##  
## Chi-squared test for given probabilities  
##  
## data: data$SEATS  
## X-squared = 174.17, df = 3, p-value < 2.2e-16
```

we calculated that chi square 174.17, $p < 2.2e-16$, null hypothesis is rejected thus, we conclude that the members of the House of Representatives are statistically representative of the religious affiliation of their constituents in the United States.