

R Code for Examples in the book

"Statistics: The Art and Science of Learning from Data" by Agresti, Franklin and Klingenberg, 5th edition

Chapter 13

Example 8: House Selling Price – Histogram of Standardized Residuals

Reading in data

```
data <-
read.csv(file='https://raw.githubusercontent.com/artofstat/data/master/Chapte
r13/house_selling_prices_or.csv')</pre>
```

Fitting in multiple regression model

```
lin.reg <- lm(HP.in.thousands ~ House.Size + Bedrooms, data = data)
lin.reg

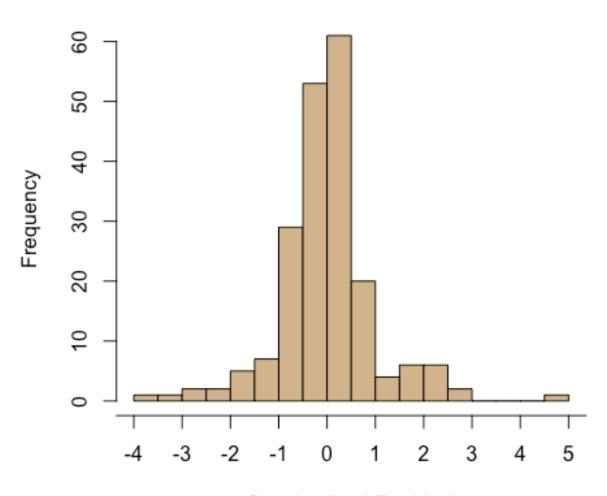
##
## Call:
## lm(formula = HP.in.thousands ~ House.Size + Bedrooms, data = data)
##
## Coefficients:
## (Intercept) House.Size Bedrooms
## 60.10214 0.06298 15.17041</pre>
```

To obtain standardized residuals

```
stdres <- rstandard(lin.reg)
head(stdres)
## 1 2 3 4 5 6
## 0.2643425 0.6441210 -1.6377349 0.1023211 -0.3326797 1.9403118</pre>
```

To create a histogram of the standardized residuals

Histogram



Standardized Residual