

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 10: House Selling Price – Indicator Variables

Reading in data

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

Fitting in multiple regression model

```
linReg <- lm(House.Price..USD.~ House.Size + Condition, data = houses)</pre>
summary(linReg)
##
## Call:
## lm(formula = House.Price..USD. ~ House.Size + Condition, data = houses)
## Residuals:
      Min
                1Q Median
                               30
                                       Max
## -312024 -33585
                     -852
                            28105 382876
##
## Coefficients:
                Estimate Std. Error t value Pr(>|t|)
##
## (Intercept) 96270.971 13464.912 7.150 1.66e-11 ***
## House.Size
                  66.463
                             4.682 14.196 < 2e-16 ***
## Condition
              12926.940 17196.712 0.752
                                              0.453
## ---
                  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
## Signif. codes:
## Residual standard error: 81790 on 197 degrees of freedom
## Multiple R-squared: 0.5062, Adjusted R-squared: 0.5012
## F-statistic: 101 on 2 and 197 DF, p-value: < 2.2e-16
```