Example & Figure 10-1

September 11, 2020

```r
[ ]: # install the following package and libraries
     install.packages("pder")
     install.packages("ggplot2")
     install.packages("devtools")
     devtools::install_github("wmurphyrd/fiftystater")
     install.packages("mapproj")

     library("pder")
     library("fiftystater")
     library("ggplot2")
```

```r
[14]: ##--------------------------------Block 1--------------------------------

      #### Example 10-1 ####

      data("HousePricesUS", package="pder")
      data("fifty_states")
      houses00 <- subset(HousePricesUS, year == 2000)
      houses00$name <- tolower(houses00$name)

      #### Figure 10.1 ####

      # map_id creates the aesthetic mapping to the state name column in your data
      p <- ggplot(houses00, aes(map_id = name)) +
        geom_map(aes(fill = price), map = fifty_states) +
        expand_limits(x = fifty_states$long, y = fifty_states$lat) +
        coord_map() +
        scale_x_continuous(breaks = NULL) +
        scale_y_continuous(breaks = NULL) +
        labs(x = "", y = "") +
        theme(legend.position = "bottom",
              panel.background = element_blank()) +
        theme(legend.text = element_text(size = 8),
        legend.title= element_text(size = 10),
        axis.title = element_text(size = 10))

      p
```

price
75 100 125 150 175