

Counter in functions

Using environments in R

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```
myMSE <- function(lambda, X, Y, Xtest, Ytest, iterCounter = FALSE){  
  
  model_temp <- loess(Y ~ X, enp.target = lambda)  
  
  pred_temp <- predict(model_temp, newdata = Xtest)  
  MSE <- (1/length(pred_temp))*sum((Ytest - pred_temp)^2)  
  
  # If we want a iteration counter  
  if(iterCounter){  
  
    if(!exists("iterForMyMSE")){  
  
      # Control if the variable exists in the global environemnt,  
      # if not, create a variable and set the value to 1. This  
      # would be the case for the first iteration  
  
      # We will call the variable 'iterForMyMSE'  
      assign("iterForMyMSE",  
            value = 1,  
            globalenv())  
  
    } else {  
  
      # This part is for the 2nd and the subsequent iterations.  
  
      # Starting of with obtaining the current iteration number  
      # and then overwrite the current value by the incremental  
      # increase of the current value  
  
      currentNr <- get("iterForMyMSE")  
      assign("iterForMyMSE",  
            value = currentNr + 1,  
            globalenv())  
    }  
  }  
  
  return(MSE)  
}
```