Multiple Linear Regression in R - Automatic Backward Elimination

Section 5, Lecture 54

Hi guys,

if you are also interested in an automatic implementation of Backward Elimination in R, here it is:

```r
 1    backwardElimination <- function(x, sl) {
 2        numVars = length(x)
 3        for (i in c(1:numVars)){
 4          regressor = lm(formula = Profit ~ ., data = x)
 5          maxVar = max(coef(summary(regressor))[c(2:numVars), "Pr(>|t|)"])
 6          if (maxVar > sl){
 7            j = which(coef(summary(regressor))[c(2:numVars), "Pr(>|t|)"] == maxVa
 8            x = x[, -j]
 9          }
10          numVars = numVars - 1
11        }
12        return(summary(regressor))
13    }
14
15    SL = 0.05
16    dataset = dataset[, c(1,2,3,4,5)]
17    backwardElimination(training_set, SL)
```

Kind regards,

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