



Multiple Linear Regression in R - Automatic Backward Elimination

Section 5, Lecture 51

Hi guys,

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

```
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|)"] == maxVar)  
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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