

help_with_ZYXU_package

ZY_XU

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How to play with “ZYXUnaivelasso” ?

This is a package that calculate the lasso problem(very, very, very naive),

since I set the lambda to a fixed value 2, the result in example is not

different with normal linear regression(kind of embarrassing), but I still

want to write it out, just for fun!

Hope you guys have fun here ! :)

How to library it?

** First, you need to download the .tar file named “ZYXUnaivelasso_1.0.tar”, then run the code below:**

```
rm(list=ls())
if (!require("ZYXUnaivelasso")) {
  install.packages("ZYXUnaivelasso_1.0.tar.gz",
    repos = NULL,
    type = "source") # do this once per lifetime
  stopifnot(require("ZYXUnaivelasso")) # do this once per session
}
```

Loading required package: ZYXUnaivelasso

You can Shutdown R studio and open “help.R”

```
require("ZYXUnaivelasso")
```

How to use it?

** you can use lasso function to calculate the problem with your own data, same as the lm() function in simple linear regression with only two parameter beta0 and beta1.**

There are four function,

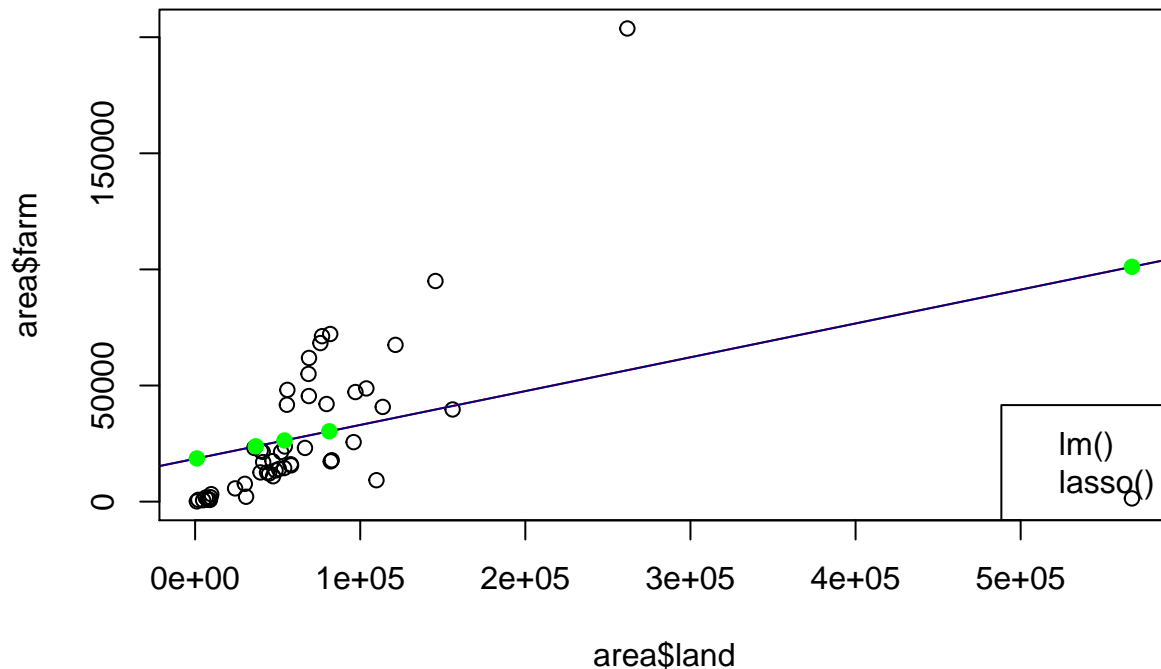
1:the “lasso” you use to fit model. 2: The “print” you use to print coefficients

3:The “coef” you use to extract coefficients

4:The predict you use to predict new values

```
example(lasso)
```

```
##
## lasso> obj = lasso(area$land,area$farm)
##
## lasso> print(obj)
## beta0: 18452.42
## beta1: 0.1456762
##
## lasso> plot(area$land,area$farm)
```



```
##
## lasso> abline(reg = lm(farm~land,data = area),col = "red")
##
## lasso> abline(reg = obj,col = "navy")
##
## lasso> legend("bottomright",legend = c("lm()", "lasso()"),col = c("red", "navy"))
##
## lasso> x_new = quantile(area$land,probs = seq(0,1,1/4))
##
## lasso> y_new = predict(obj = obj,x_new = x_new)
##
## lasso> points(x = x_new,y = y_new, col = "green",pch = 19)
?lasso
```

```
## starting httpd help server ... done
```

```
?coef.las  
?predict.las  
?print.las  
?area
```

I wrote all the help web by myself, whether there is link you can click into it to see the description I wrote about my package~~