|  |
| --- |
| > library(ISLR)  > library(tree)  > data(Carseats)  > fix(Carseats)  > names(Carseats)  [1] "Sales" "CompPrice" "Income" "Advertising"  [5] "Population" "Price" "ShelveLoc" "Age"  [9] "Education" "Urban" "US"  > set.seed(2)  > train <- sample(1:nrow(Carseats), 200)  > Carseats.test <- Carseats[-train,]  > High.test <- High[-train]  > Sales.test <- Sales[-train]  Error: object 'Sales' not found  > set.seed(1)  > train <- sample(1:nrow(Carseats), nrow(Carseats)/2)  > tree.carseats <- tree(Sales ~ ., Carseats, subset=train)  >  > summary(tree.carseats)  Regression tree:  tree(formula = Sales ~ ., data = Carseats, subset = train)  Variables actually used in tree construction:  [1] "ShelveLoc" "Price" "Age" "Advertising"  [5] "CompPrice" "US"  Number of terminal nodes: 18  Residual mean deviance: 2.167 = 394.3 / 182  Distribution of residuals:  Min. 1st Qu. Median Mean 3rd Qu. Max.  -3.88200 -0.88200 -0.08712 0.00000 0.89590 4.09900  > plot(tree.carseats)  > text(tree.carseats,pretty = 0)  > cv.carseats <- cv.tree(tree.carseats)  > plot(cv.carseats$size, cv.carseats$dev, type = 'b')  > prune.carseats <- prune.tree(tree.carseats, best=5)  > plot(prune.carseats)  > text(prune.carseats, pretty=0)  > yhat <- predict(tree.carseats, newdata = Carseats[-train,])  > carseats.test = Carseats[-train,"Sales"]  > plot(yhat,carseats.test)  > abline(0,1)  > mean((yhat - carseats.test)ˆ2)  Error: unexpected input in "mean((yhat - carseats.test)\"  > mean((yhat - carseats.test)ˆ2)  Error: unexpected input in "mean((yhat - carseats.test)\"  > mean((yhat - carseats.test)^2)  [1] 4.922039 |

> library(ISLR)

> library(tree)

> data(Carseats)

> fix(Carseats)

> names(Carseats)

[1] "Sales" "CompPrice"

[3] "Income" "Advertising"

[5] "Population" "Price"

[7] "ShelveLoc" "Age"

[9] "Education" "Urban"

[11] "US"

> set.seed(2)

> train <- sample(1:nrow(Carseats), 200)

> Carseats.test <- Carseats[-train,]

> High.test <- High[-train]

> set.seed(1)

> train <- sample(1:nrow(Carseats), nrow(Carseats)/2)

> tree.carseats <- tree(Sales ~ ., Carseats, subset=train)

> summary(tree.carseats)

Regression tree:

tree(formula = Sales ~ ., data = Carseats, subset = train)

Variables actually used in tree construction:

[1] "ShelveLoc" "Price" "Age" "Advertising"

[5] "CompPrice" "US"

Number of terminal nodes: 18

Residual mean deviance: 2.167 = 394.3 / 182

Distribution of residuals:

Min. 1st Qu. Median Mean 3rd Qu. Max.

-3.88200 -0.88200 -0.08712 0.00000 0.89590 4.09900

> plot(tree.carseats)

> text(tree.carseats,pretty = 0)

