```
# Classification Tree with rpart
library(rpart)

# grow tree
fit <- rpart(Kyphosis ~ Age + Number + Start,
   method="class", data=kyphosis)

printcp(fit) # display the results
plotcp(fit) # visualize cross-validation results
summary(fit) # detailed summary of splits

# plot tree
plot(fit, uniform=TRUE,
   main="Classification Tree for Kyphosis")
text(fit, use.n=TRUE, all=TRUE, cex=.8)

# prune the tree
su

# Regression Tree Example
library(rpart)

# grow tree
fit <- rpart(Mileage~Price + Country +
Reliability + Type,
   method="anova", data=cu.summary)

printcp(fit) # display the results
plotcp(fit) # visualize cross-validation results
summary(fit) # detailed summary of splits

# create additional plots
par(mfrow=c(1,2)) # two plots on one page
rsq.rpart(fit) # visualize cross-validation
results
```

```
# plot tree
plot(fit, uniform=TRUE,
   main="Regression Tree for Mileage ")
text(fit, use.n=TRUE, all=TRUE, cex=.8)

# prune the tree
pfit<- prune(fit, cp=0.01160389) # from cptable


# plot the pruned tree
plot(pfit, uniform=TRUE,
   main="Pruned Regression Tree for Mileage")
text(pfit, use.n=TRUE, all=TRUE, cex=.8)
```