

# wk-6-EC-RPART\_02JUNE.R

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*Wed Jun 03 13:09:03 2015*

```
# Week 6 - Classification Trees Assignment
ec <- read.csv("C:/STAT/_____STATISTICS_OWN/_____bridge_school/CANVAS-Pdf's/___Module_2/Week
attach(ec)
#Creation of Training and Test Data
s<-c(sample(1:500,400), sample(501:1000,400), sample(1001:10000,8000))
trn<-ec[s,]
tst<-ec[-s,]
library(caret)
```

```
## Loading required package: lattice
## Loading required package: ggplot2
```

```
# Building the Classification Tree. As Dependent Variable is Binomial.
# Churned ==0 / Stayed ==1
# Model - mT created from Training Data Sample.
# Same model tested with "Test" data for Prediction Accuracy .
mT<-train(st~.,method="rpart",data =trn)
```

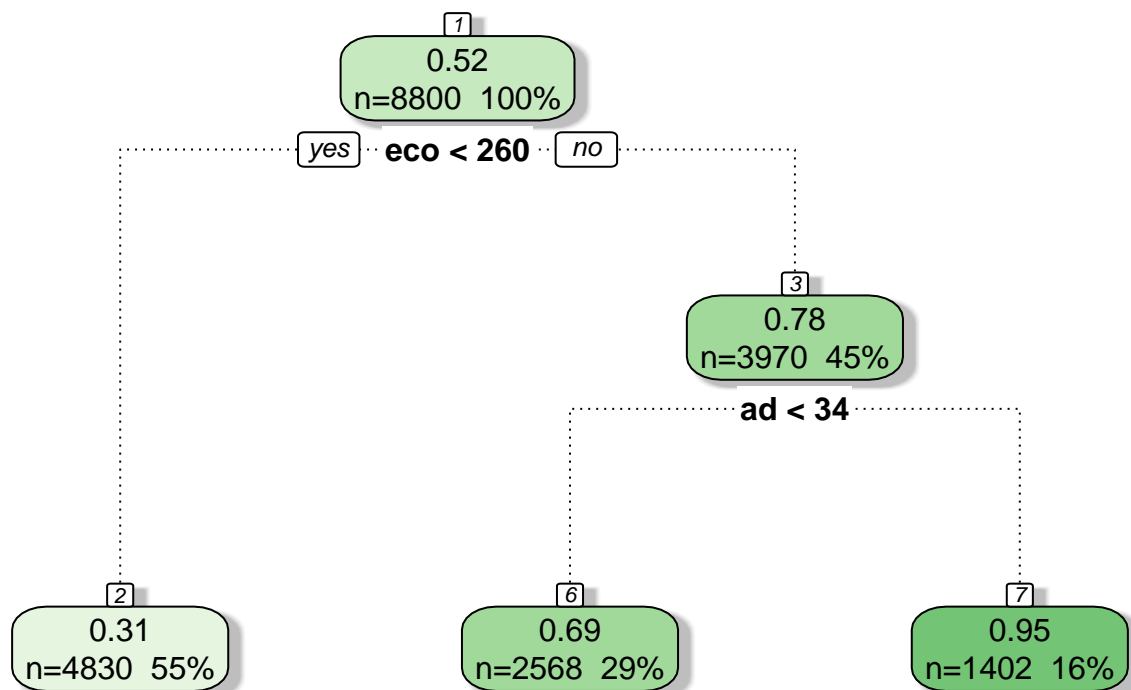
```
## Loading required package: rpart
```

```
## Warning in nominalTrainWorkflow(x = x, y = y, wts = weights, info =
## trainInfo, : There were missing values in resampled performance measures.
```

```
library(rattle)
```

```
## Rattle: A free graphical interface for data mining with R.
## Version 3.4.1 Copyright (c) 2006-2014 Togaware Pty Ltd.
## Type 'rattle()' to shake, rattle, and roll your data.
```

```
fancyRpartPlot(mT$finalModel)
```



Rattle 2015-Jun-03 13:09:16 Rohit

```
#Prediction for Training Data
```

```
TrnPred<-predict(mT, newdata=trn)
```

```
head(TrnPred)
```

```
## [1] 0.3122153 0.6896417 0.3122153 0.6896417 0.9465050 0.6896417
```

```
table(trn$st,TrnPred)
```

```
##      TrnPred
##      0.312215320910973 0.689641744548287 0.946504992867332
## 0          3322           797           75
## 1          1508          1771          1327
```