Untitled

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classification model

```
library(dplyr)
```

```
## Warning: package 'dplyr' was built under R version 3.4.3
```

```
##
## Attaching package: 'dplyr'
```

```
## The following objects are masked from 'package:stats':
##
##     filter, lag
```

```
## The following objects are masked from 'package:base':
##
##     intersect, setdiff, setequal, union
```

```
bank <- read.csv("C:/Users/Administrator/Desktop/Machine Learning/DATA
SETS/bank.csv",header = TRUE,
                 sep = ";")

dim(bank)
```

```
## [1] 4521   17
```

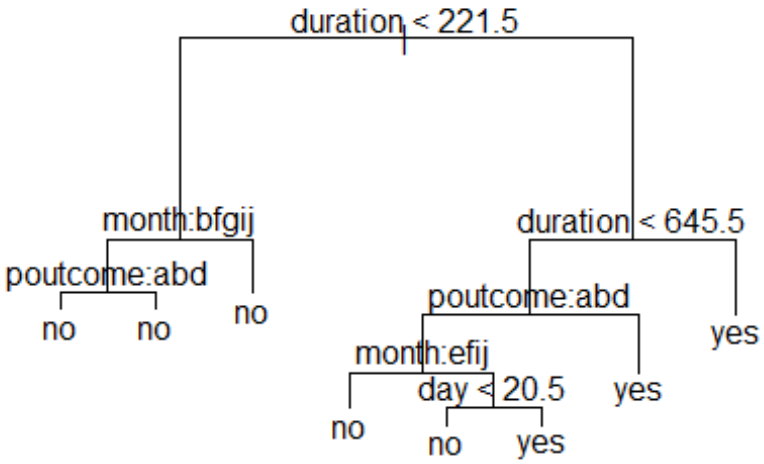
```
bank_training <- bank[sample(seq(1,nrow(bank)),3616),]
bank_testing <- bank[sample(seq(1,nrow(bank)),4521-3616),]

library(tree) # decsion trees
```

```
## Warning: package 'tree' was built under R version 3.4.4
```

```
bank_model <- tree(y ~ .,data = bank_training)

{{plot(bank_model)
text(bank_model)}}
```




```
probs <-  as.data.frame(predict(bank_model,bank_testing %>% select(-y)))

probs$predict = ifelse(probs$no > probs$yes,'no','yes')


bank_testing$predicted <- probs$predict

sum(bank_testing$y == bank_testing$predicted)

## [1] 798

nrow(bank_testing) # out of 905 cases 813 cases are correctly predicted

## [1] 905

819/905 * 100 # 90.5 % accuracy

## [1] 90.49724
```