CS422 - HW2

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9/28/2020

Part 1.1

```
setwd("~/Desktop")
train.df <- iris
library(rpart)
library(rpart.plot)

mytree <- rpart(
  Species ~.,
  data = train.df,
method = "class"
)
# Text representation
mytree
```

```
## n= 150
##
## node), split, n, loss, yval, (yprob)
##       * denotes terminal node
##
## 1) root 150 100 setosa (0.33333333 0.33333333 0.33333333)
##   2) Petal.Length< 2.45 50   0 setosa (1.00000000 0.00000000 0.00000000) *
##   3) Petal.Length>=2.45 100  50 versicolor (0.00000000 0.50000000 0.50000000)
##     6) Petal.Width< 1.75 54   5 versicolor (0.00000000 0.90740741 0.09259259) *
##     7) Petal.Width>=1.75 46   1 virginica (0.00000000 0.02173913 0.97826087) *
```

```
# Plot representation
rpart.plot(mytree, extra = 104, fallen.leaves = T, type = 4, main = "Iris Dataset Decision Tree")
```