Exercise 9.1 CART (Part 2)

Note: Students may volunteer to present their solution in class for additional participation points.

1. In Rscript mtcars CART.R, the numbers in variable importance are presented differently depending on the function used – variable.importance or summary(). Write your Rcode to scale the variable.importance output so that the same numbers in summary() are obtained.

```
66  cart2$variable.importance
67  ## weight has the highest importance, disp is second impt.
```

```
> cart2$variable.importance
       wt      disp        hp      drat       cyl      qsec        vs      carb
965.37479 914.94074 699.65200 393.23532 341.73192 218.72553 164.43303  14.26042
```

```
71  summary(cart2)
```

```
Variable importance
 wt disp   hp drat  cyl qsec   vs
 26   25   19   11    9    6    4
```

Instructor solution: mtcars CART v2.R

2. Dataset: default.csv [10,000 rows, 4 columns. Given in logistic regression unit]. Compare the testset performance of the logistic regression model (excluding Income variable) vs the optimal CART model. Is income also unimportant in the optimal CART model? Comment on the model findings.

Instructor solution: default CART.R