## Class Balance: Subsampling

This example shows how to handle class imbalance by applying subsampling (reduce the majority class) on an imbalanced subset of the Iris dataset.

Prerequisites - R packages: daltoolbox, daltoolboxdp

# Installation (if needed)  
#install.packages("daltoolboxdp")

# Loading packages  
library(daltoolbox)  
library(daltoolboxdp)

# Example data and creation of artificial imbalance  
iris <- datasets::iris  
data(iris)  
mod\_iris <- iris[c(1:50,51:71,101:111),]  
table(mod\_iris$Species) # original distribution

##   
## setosa versicolor virginica   
## 50 21 11

# Subsampling - reduce the majority class to balance  
bal <- bal\_subsampling('Species')  
bal <- daltoolbox::fit(bal, mod\_iris)  
adjust\_iris <- daltoolbox::transform(bal, mod\_iris)  
table(adjust\_iris$Species) # distribution after subsampling

##   
## setosa versicolor virginica   
## 11 11 11