Module 12 Markdown Functions

# Tenative Functions

This document contains, as requested by the assignment, a series of *tenative* functions for R programing in relation to the final project that has been assigned for the course. Especially since I have not had my proposal for the project confirmed yet, I wisht to stress these are all works in progress and in need of further refinement.  
The idea behind the functions is that the functions will be able to be fed a dataset purporting to represent a fictional gym and the daily uses of various resources in the gym over the course of a year for a five year period. The first function should allow for the generation of a yearly mean, with the second hopefully allowing for a mean of all the years for a service at once. The final function that I have currently written would hopefully allow me to take the means for each year for each topic/data and then convert them into per-year graphs, allowing for the data to be visually presented.

# Non-visual functions

## Various Services Use per Day by Year {r} DailyUseYearMean<-function(x){ x2030<-mean(x[7:20]) x2031<-mean(x[9:21]) x2032<-mean(x[5:15]) x2033<-mean(x[6:19]) x2034<-mean(x[8:19]) XDailyYearlyMeans<-cbind(x2030, x2031, x2032, x2033, x2034) print(XDailyYearlyMeans) }

## Generating Means for all columns {r} TheMeanColumnTotal<-function(x){ TheMeanColumnTotal<-colMeans(x) }

# Visualization Tools

## Graphing Service Means by Year {r} DailyUsesChart<-function(x){ M1<-DailyUsePerYearMean(x[,1]) M2<-DailyUsePerYearMean(x[,2]) M3<-DailyUsePerYearMean(x[,3]) M4<-DailyUsePerYearMean(x[,4]) M5<-DailyUsePerYearMean(x[,5]) M6<-DailyUsePerYearMean(x[,6]) barplot(M1, col = "black", main= "Member Sign-In Terminal Daily Use: Yearly Mean", xlab="Years") barplot(M2, col = "darkolivergreen1", main= "Daily Use of Bodybuilding Equipment: Yearly Mean", xlab="Years") barplot(M3, col = "darkorchid1", main= "Daily Personal Trainer Appointments: Yearly Mean", xlab="Years") barplot(M4, col = "firebrick1", main= "Daily Attendence of Children's Fitness class: Yearly Mean", xlab="Years") barplot(M5, col = "gold", main= "Daily Use of Aerobics Equipment: Yearly Mean", xlab="Years") barplot(M6, col = "hotpink", main= "Daily Use of Sign-In sheet for pool: Yearly Mean", xlab="Years") }