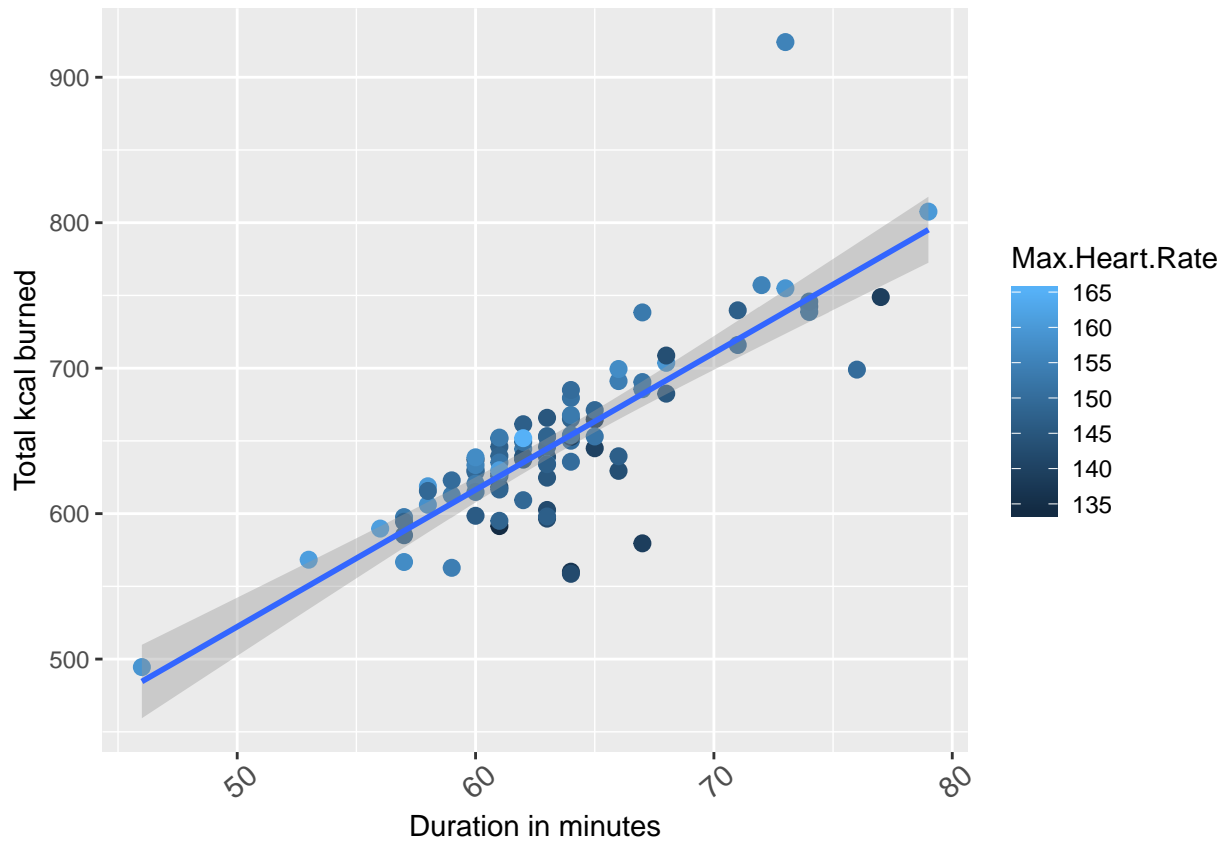


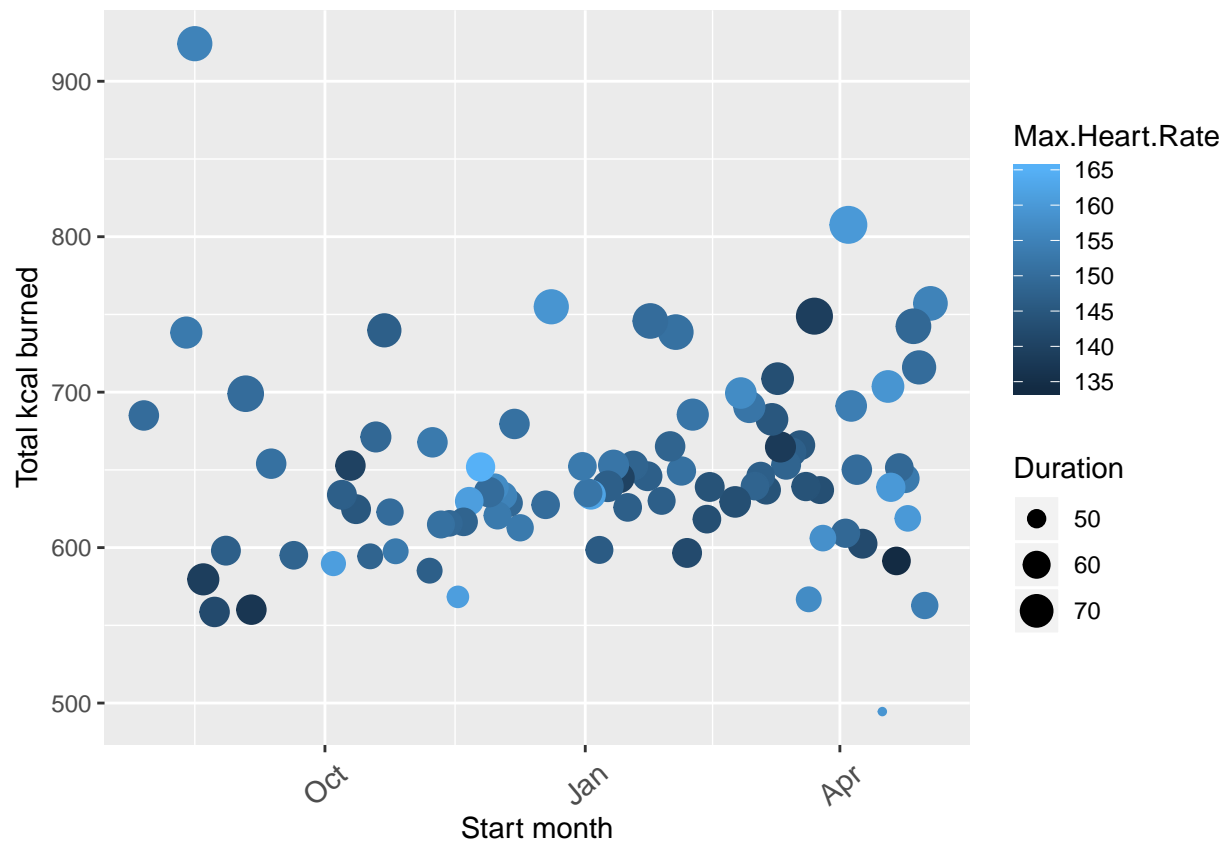
Hot Yoga Data Visualization from Apple Watch Data

```
#  
#clean up the data set (remove non-yoga workouts, convert data to usable formats)  
#  
  
library("chron")  
  
#import data  
yoga_data = read.csv('/Users/nickorangio/Main Directory/Personal Projects/R Data Viz/allWorkouts04-May-2017.csv')  
  
yoga_data <- data.frame(yoga_data)  
  
#subset for yoga data  
yoga_subset <- subset(yoga_data, Type == "Yoga")  
  
#remove unneeded columns  
yoga_subset <- within(yoga_subset, rm(Distance, Average.Speed, Average.Pace))  
  
#convert start and end to dates  
yoga_subset$Start <- as.Date(yoga_subset$Start, format = "%Y-%m-%d")  
yoga_subset$End <- as.Date(yoga_subset$End, format = "%Y-%m-%d")  
  
#convert duration to minutes  
yoga_subset$Duration <- as.character(yoga_subset$Duration)  
yoga_subset$Duration <- times(yoga_subset$Duration)  
yoga_subset$Duration <- minutes(yoga_subset$Duration) + 60*hours(yoga_subset$Duration)  
  
#remove outlier (was not actually yoga)  
yoga_subset <- yoga_subset[-2,]  
  
library("ggplot2")  
  
#kcal by duration  
ggplot(yoga_subset, aes(x=Duration, y=Total.Energy.kcal)) +  
  geom_point(aes(colour=Max.Heart.Rate), size = 2.5) +  
  theme(axis.text.x = element_text(size = 11, angle = 40, vjust = 0.7)) +  
  ylab("Total kcal burned") + xlab("Duration in minutes") +  
  geom_smooth(method = lm)
```



Exploratory analysis examining calories burned by duration shows a strong linear relationship, with calories burned increasing with longer durations.

```
#kcal by date
ggplot(yoga_subset, aes(x=Start, y=Total.Energy.kcal)) +
  geom_point(aes(size=Duration, colour=Max.Heart.Rate)) +
  theme(axis.text.x = element_text(size = 11, angle = 40, vjust = 0.5)) +
  ylab("Total kcal burned") + xlab("Start month")
```



Calories burned over the last year are fairly consistent.