Cyclistics Bikesharing###

This is an [R Markdown](http://rmarkdown.rstudio.com) Notebook. When you execute code within the notebook, the results appear beneath the code.

\*\*\*[Workspace loaded from C:/Users/staku/OneDrive/Capstone\_folder/divvey/.RData]\*\*\*

###First I used [install.packages] to install the packages I needed for the analysis, then attached them to my session by using the code chunk below###

knitr::opts\_chunk$set(echo = TRUE)  
  
library("readr")  
library("ggplot2")  
library("tidyverse")

## ── Attaching core tidyverse packages ──────────────────────── tidyverse 2.0.0 ──  
## ✔ dplyr 1.1.2 ✔ stringr 1.5.0  
## ✔ forcats 1.0.0 ✔ tibble 3.2.1  
## ✔ lubridate 1.9.2 ✔ tidyr 1.3.0  
## ✔ purrr 1.0.1   
## ── Conflicts ────────────────────────────────────────── tidyverse\_conflicts() ──  
## ✖ dplyr::filter() masks stats::filter()  
## ✖ dplyr::lag() masks stats::lag()  
## ℹ Use the conflicted package (<http://conflicted.r-lib.org/>) to force all conflicts to become errors

library("tidyr")  
library("knitr")  
library("dplR")

## This is dplR version 1.7.4.  
## dplR is part of openDendro https://opendendro.org.  
## New users can visit https://opendendro.github.io/dplR-workshop/ to get started.

library("dplyr")  
library("lubridate")

###Next, I downloaded the data I was going to use###

{r getting my data, paged.print=TRUE}

knitr::opts\_chunk$set(echo = TRUE)

(X202005\_divvy\_tripdata) (X202006\_divvy\_tripdata) (X202007\_divvy\_tripdata) (X202008\_divvy\_tripdata) (X202009\_divvy\_tripdata) (X202010\_divvy\_tripdata) (X202011\_divvy\_tripdata) (X202012\_divvy\_tripdata) (X202101\_divvy\_tripdata) (X202102\_divvy\_tripdata) (X202103\_divvy\_tripdata) (X202104\_divvy\_tripdata) (X202105\_divvy\_tripdata)

###after I uploaded my data from the website  
  
###I merged each file into one named "merged\_data" for a whole year view, on top of the monthly. This code sent it to my global environment and Work space for analysis. `code chunk below`  
  
```r  
  
  
merged\_data<-rbind(X202005\_divvy\_tripdata, X202006\_divvy\_tripdata, X202007\_divvy\_tripdata, X202008\_divvy\_tripdata, X202009\_divvy\_tripdata, X202010\_divvy\_tripdata, X202011\_divvy\_tripdata, X202012\_divvy\_tripdata, X202101\_divvy\_tripdata, X202102\_divvy\_tripdata, X202103\_divvy\_tripdata, X202104\_divvy\_tripdata, X202105\_divvy\_tripdata)  
  
merged\_data<-data.frame(merged\_data)

###Analysis for each individual month was done with spreadsheets, [Google Sheets, Microsoft Excel]

##formulas used##

##[ =WEEKDAY(D2,2) ]## - GOOGLE SHEETS

fromstarted\_at column, made new column with what day of the week it was. *1* being *Mon*, *2* being *Tues*, and so on

##[ =(D2-C2) ]## - GOOGLE SHEETS

subtracted start time and end time of each cell to determine the duration of each ride. also changed this cell to show “DURATION” so that my numbers were in the format 00:00:00.

###***for the whole year analysis***i usedrstudio`

##created a new column to see what day of the week each subscriber’s bike use.##

merged\_data$day\_of\_week <- weekdays(as.Date(merged\_data$started\_at))

data = merged\_data  
skip = 0  
skip\_empty\_rows = FALSE  
comment = ","  
skip\_quote = TRUE

**rstudio Plots for Analysis**