

# UberTripsAnalysisInR

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## R Markdown

This is an R Markdown document. Markdown is a simple formatting syntax for authoring HTML, PDF, and MS Word documents. For more details on using R Markdown see <http://rmarkdown.rstudio.com>.

When you click the **Knit** button a document will be generated that includes both content as well as the output of any embedded R code chunks within the document. You can embed an R code chunk like this:

```
library(ggthemes)

## Warning: package 'ggthemes' was built under R version 4.1.2

library(lubridate)

## Warning: package 'lubridate' was built under R version 4.1.2

##
## Attaching package: 'lubridate'

## The following objects are masked from 'package:base':
##     date, intersect, setdiff, union

library(dplyr)

## Warning: package 'dplyr' was built under R version 4.1.2

##
## Attaching package: 'dplyr'

## The following objects are masked from 'package:stats':
##     filter, lag

## The following objects are masked from 'package:base':
##     intersect, setdiff, setequal, union
```

```

library(tidyr)

## Warning: package 'tidyr' was built under R version 4.1.2

library(DT)

## Warning: package 'DT' was built under R version 4.1.2

library(scales)
library(ggplot2)
library(tidyverse)

## Warning: package 'tidyverse' was built under R version 4.1.2

## -- Attaching packages ----- tidyverse 1.3.1 --

## v tibble  3.1.4      v stringr 1.4.0
## v readr   2.1.1      vforcats 0.5.1
## v purrr   0.3.4

## Warning: package 'readr' was built under R version 4.1.2

## Warning: package 'purrr' was built under R version 4.1.2

## Warning: package 'forcats' was built under R version 4.1.2

## -- Conflicts ----- tidyverse_conflicts() --
## x lubridate::as.difftime() masks base::as.difftime()
## x readr::col_factor()     masks scales::col_factor()
## x lubridate::date()       masks base::date()
## x purrr::discard()       masks scales::discard()
## x dplyr::filter()        masks stats::filter()
## x lubridate::intersect() masks base::intersect()
## x dplyr::lag()           masks stats::lag()
## x lubridate::setdiff()   masks base::setdiff()
## x lubridate::union()     masks base::union()

val<-read.csv("uber-raw-data-sep14.csv")
head(val)

##          Date.Time      Lat      Lon Base
## 1 9/1/2014 0:01:00 40.2201 -74.0021 B02512
## 2 9/1/2014 0:01:00 40.7500 -74.0027 B02512
## 3 9/1/2014 0:03:00 40.7559 -73.9864 B02512
## 4 9/1/2014 0:06:00 40.7450 -73.9889 B02512
## 5 9/1/2014 0:11:00 40.8145 -73.9444 B02512
## 6 9/1/2014 0:12:00 40.6735 -73.9918 B02512

```

```

val$Date.Time <- as.POSIXct(val$Date.Time, format = "%m/%d/%Y %H:%M:%S")
val$Time <- format(as.POSIXct(val$Date.Time, format = "%m/%d/%Y %H:%M:%S"), format="%H:%M:%S")
val$day <- factor(lubridate::day(val$Date.Time))
val$weekday <- factor(lubridate::wday(val$Date.Time, label = TRUE))
val$hour <- factor(lubridate::hour(lubridate::hms(val$Time)))

```

## Including Plots

You can also embed plots, for example:

```

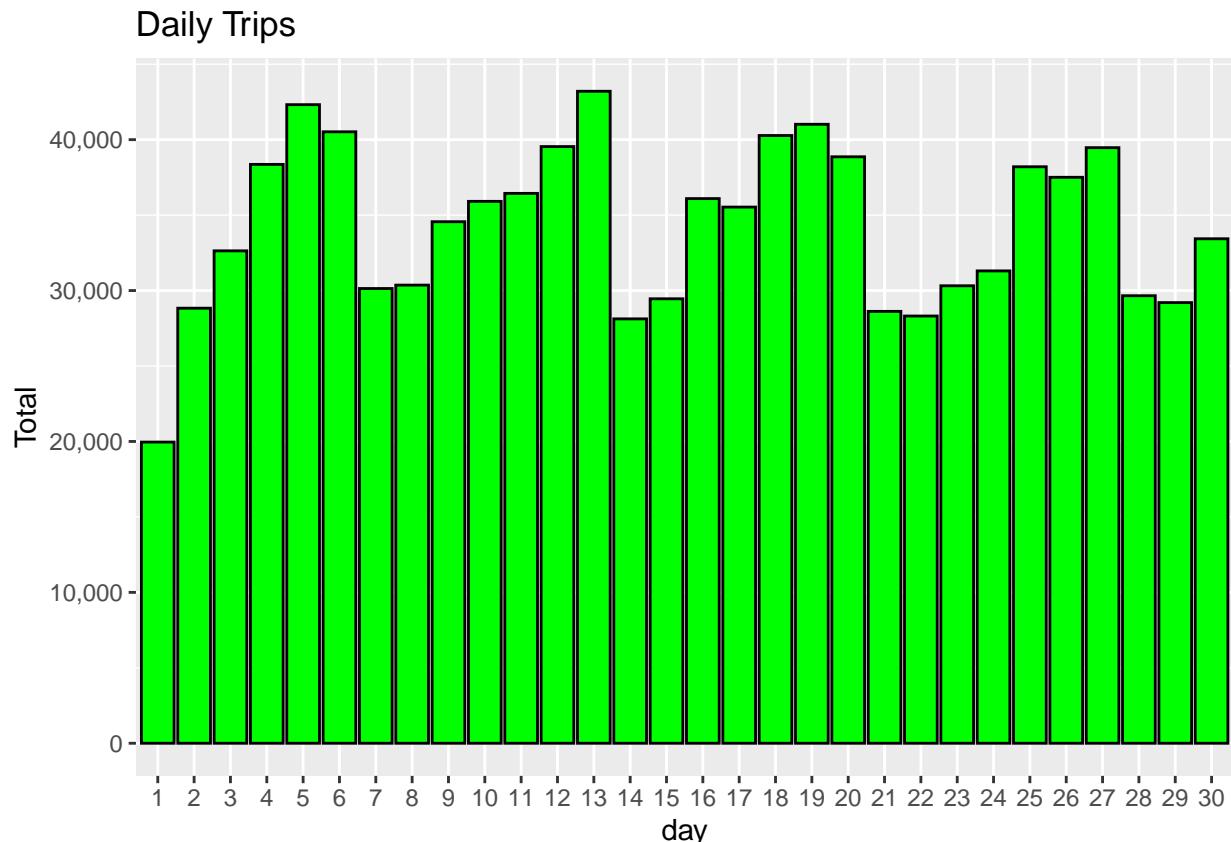
dayTrips <- val %>%
  group_by(day) %>%
  dplyr::summarize(Total = n())
datatable(dayTrips)

```

```

ggplot(dayTrips,aes(day,Total)) +
  geom_bar(stat="identity",fill="green",colour="black") +
  ggtitle("Daily Trips") +
  scale_y_continuous(labels = comma)

```

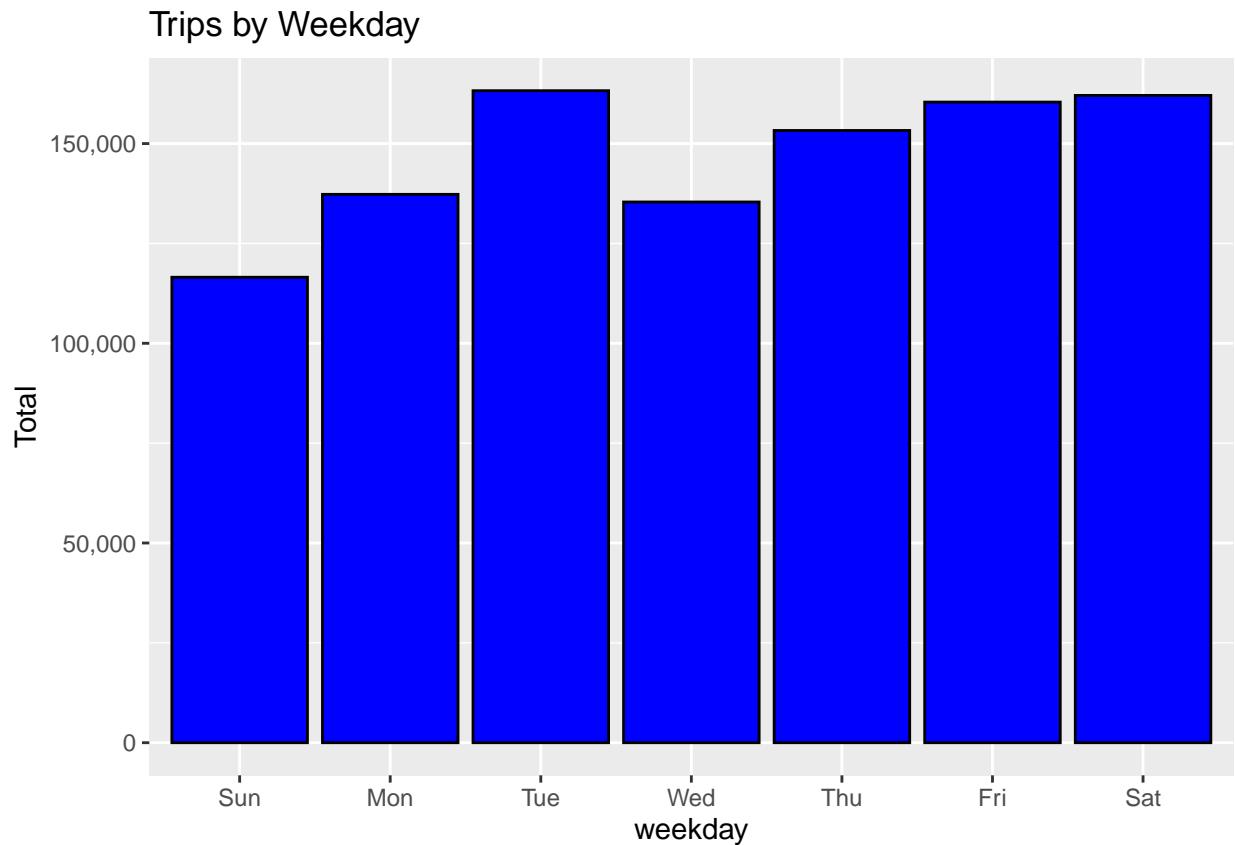


```

weekdayTrips <- val%>%
  group_by(weekday) %>%
  dplyr::summarize(Total = n())
datatable(weekdayTrips)

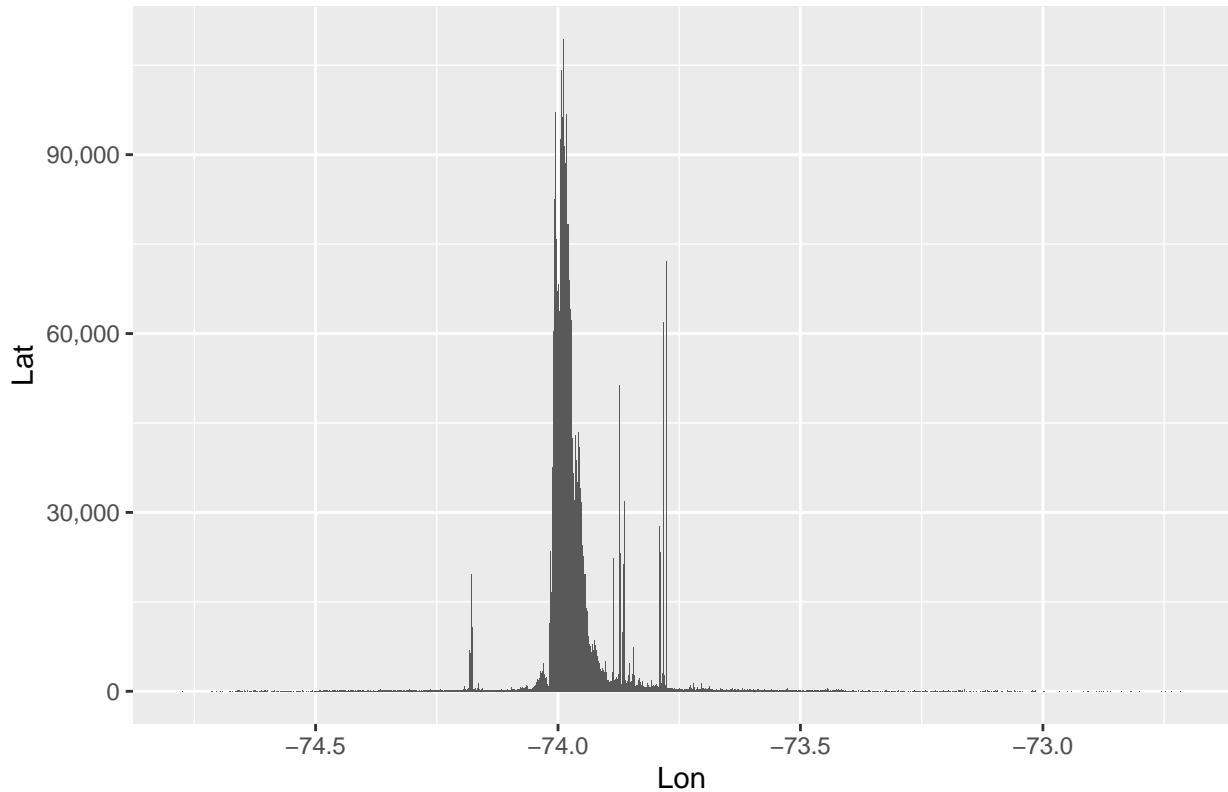
```

```
ggplot(weekdayTrips, aes(weekday,Total)) +  
  geom_bar( stat = "identity", fill = "blue", color = "black") +  
  ggtitle("Trips by Weekday") +  
  scale_y_continuous(labels = comma)
```



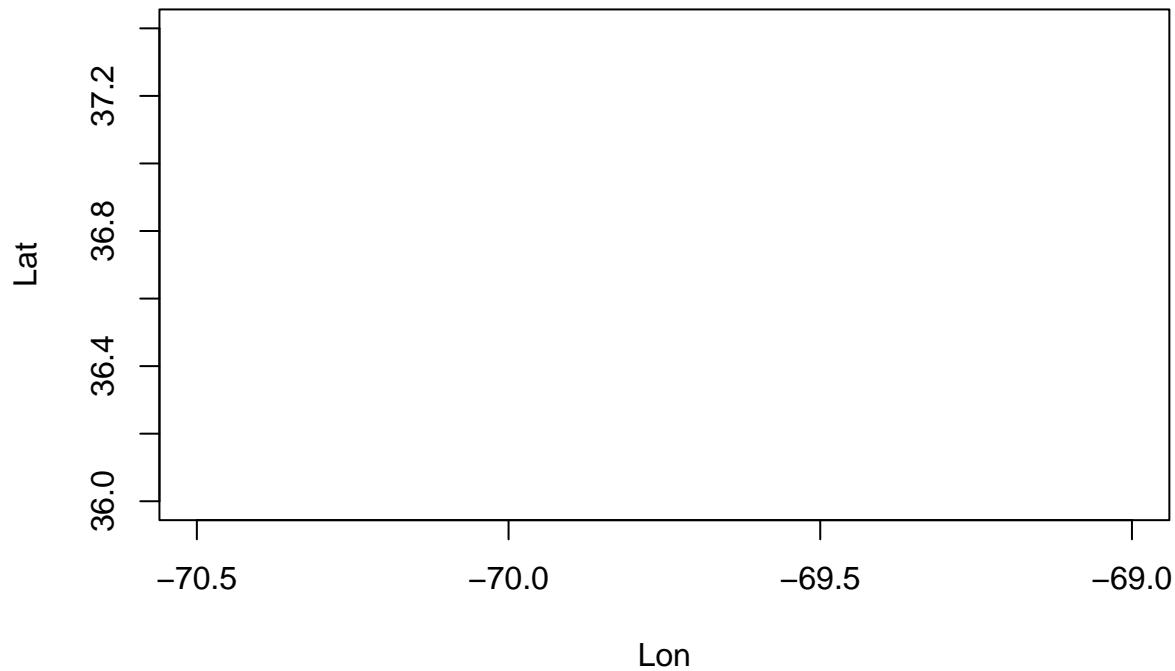
```
ggplot(val, aes(Lon,Lat)) +  
  geom_bar( stat = "identity") +  
  ggtitle("Uber Trips") +  
  scale_y_continuous(labels = comma)
```

## Uber Trips



```
plot(x = val$Lon, y = val$Lat,
      xlab = "Lon",
      ylab = "Lat",
      xlim = c(-70.5,-69.0),
      ylim = c(36.0,37.4),
      main = "Uber Trips Analysis"
)
```

## Uber Trips Analysis



Note that the `echo = FALSE` parameter was added to the code chunk to prevent printing of the R code that generated the plot.