

Lab5

Vergil

November 7, 2015

Part 1

```
library(ggmap)
```

```
## Loading required package: ggplot2
```

```
library(leaflet)
visit.wine <- read.csv("http://www.stat.ucla.edu/~vlew/datasets/winery2015.csv", stringsAsFactors=FALSE)
visit.wine <- visit.wine[1:101,]
str(visit.wine)
```

```
## 'data.frame':    101 obs. of  10 variables:
## $ Winery      : chr  "Tom Scott Vineyard" "Steltzner Vineyards" "Rowland Cellars" "Roots Run Deep" ...
## $ Address     : chr  "1465 Yountville Cross Road" "6795 Washington St. #202" "1883 Carignan Way" "6795 Washington Street #C" ...
## $ City        : chr  "Yountville" "Yountville" "Yountville" "Yountville" ...
## $ Website     : chr  "www.tomscottvineyard.com" "www.steltzner.com" "www.rowlandcellars.com" "www.rootsrundeeep.com" ...
## $ Phone       : chr  "944-0544" "944-2486" "944-0543" "945-1045" ...
## $ NWP         : chr  "X" "X" "X" "" ...
## $ App         : chr  "Private" "Private" "Private" "Private" ...
## $ Cave        : chr  "" "" "" "" ...
## $ Tours       : chr  "" "" "" "" ...
## $ Notes.Labels: chr  "" "" "Cenay & Ramspeck Wine" "Educated Guess" ...
```

```
head(visit.wine)
```

```
##           Winery           Address           City
## 1      Tom Scott Vineyard 1465 Yountville Cross Road Yountville
## 2      Steltzner Vineyards 6795 Washington St. #202 Yountville
## 3      Rowland Cellars      1883 Carignan Way Yountville
## 4      Roots Run Deep 6795 Washington Street #C Yountville
## 5 Kapcsandy Family Winery      1001 State Lane Yountville
## 6      Jessup Cellars      6740 Washington Street Yountville
##           Website      Phone NWP      App Cave Tours
## 1 www.tomscottvineyard.com 944-0544      X Private
## 2      www.steltzner.com 944-2486      X Private
## 3      www.rowlandcellars.com 944-0543      X Private
## 4      www.rootsrundeeep.com 945-1045      Private
## 5      www.kapcsandywines.com 948-3100      X      Yes
## 6      www.jessupcellars.com 944-8523      X      No
##           Notes.Labels
## 1
## 2
## 3      Cenay & Ramspeck Wine
## 4      Educated Guess
## 5 Thurs, Friday 2pm Sept onward
## 6
```

Task 1

```
visit.wine$State <- rep("CA",nrow(visit.wine))
visit.wine$Address <- paste(visit.wine$Address,visit.wine$City,visit.wine$State,sep = ",")

visit.wine$Address <- gsub("\\\\#", "number ",visit.wine$Address)
head(visit.wine$Address)
```

```
## [1] "1465 Yountville Cross Road,Yountville,CA"
## [2] "6795 Washington St. number 202,Yountville,CA"
## [3] "1883 Carignan Way,Yountville,CA"
## [4] "6795 Washington Street number C,Yountville,CA"
## [5] "1001 State Lane,Yountville,CA"
## [6] "6740 Washington Street,Yountville,CA"
```

Task 2

```
geocodeQueryCheck()
```

```
## 2500 geocoding queries remaining.
```

```
locg <- geocode(visit.wine$Address, output="latlona", messaging=FALSE, source="google")
```

Information from URL : <http://maps.googleapis.com/maps/api/geocode/json?address=1465%20Yountville%20Cross%20Road,Yountville,CA&sensor=false>

Information from URL : <http://maps.googleapis.com/maps/api/geocode/json?address=6795%20Washington%20St.%20number%20202,Yountville,CA&sensor=false>

Information from URL : <http://maps.googleapis.com/maps/api/geocode/json?address=1883%20Carignan%20Way,Yountville,CA&sensor=false>

Information from URL : <http://maps.googleapis.com/maps/api/geocode/json?address=6795%20Washington%20Street%20number%20C,Yountville,CA&sensor=false>

Information from URL : <http://maps.googleapis.com/maps/api/geocode/json?address=1001%20State%20Lane,Yountville,CA&sensor=false>

Information from URL : <http://maps.googleapis.com/maps/api/geocode/json?address=6740%20Washington%20Street,Yountville,CA&sensor=false>

Information from URL : <http://maps.googleapis.com/maps/api/geocode/json?address=6204%20Washington%20Street,Yountville,CA&sensor=false>

Information from URL : <http://maps.googleapis.com/maps/api/geocode/json?address=6540%20Washington%20Street,Yountville,CA&sensor=false>

Information from URL : <http://maps.googleapis.com/maps/api/geocode/json?address=6512%20Washington%20Street,Yountville,CA&sensor=false>

Information from URL : <http://maps.googleapis.com/maps/api/geocode/json?address=6548%20Washington%20Street,Yountville,CA&sensor=false>

.Information from URL : <http://maps.googleapis.com/maps/api/geocode/json?address=1119%20State%20Lane,Yountville,CA&sensor=false>

.Information from URL : <http://maps.googleapis.com/maps/api/geocode/json?address=6795%20Washington%20Street,Yountville,CA&sensor=false>

.Information from URL : <http://maps.googleapis.com/maps/api/geocode/json?address=6633%20Yount%20Street,Yountville,CA&sensor=false>

.Information from URL : <http://maps.googleapis.com/maps/api/geocode/json?address=2055%20Hoffman%20Lane,Yountville,CA&sensor=false>

.Information from URL : <http://maps.googleapis.com/maps/api/geocode/json?address=2570%20Napanook%20Road,Yountville,CA&sensor=false>

.Information from URL : <http://maps.googleapis.com/maps/api/geocode/json?address=1%20California%20Drive,Yountville,CA&sensor=false>

.Information from URL : <http://maps.googleapis.com/maps/api/geocode/json?address=6206%20Washington%20Street,Yountville,CA&sensor=false>

.Information from URL : <http://maps.googleapis.com/maps/api/geocode/json?address=7415%20St.%20Helena%20Highway%20,Yountville,CA&sensor=false>

.Information from URL : <http://maps.googleapis.com/maps/api/geocode/json?address=1473%20Yountville%20Cross%20Road%20,Yountville,CA&sensor=false>

Information from URL : <http://maps.googleapis.com/maps/api/geocode/json?address=4%20Vineyard%20View%20Drive,Yountville,CA&sensor=false>

.Information from URL : <http://maps.googleapis.com/maps/api/geocode/json?address=1185%20State%20Lane,Yountville,CA&sensor=false>

.Information from URL : <http://maps.googleapis.com/maps/api/geocode/json?address=6200%20Washington%20Street,Yountville,CA&sensor=false>

.Information from URL : <http://maps.googleapis.com/maps/api/geocode/json?address=1901%20Finnell%20Road,Yountville,CA&sensor=false>

.Information from URL : <http://maps.googleapis.com/maps/api/geocode/json?address=6236%20Silverado%20Trail,Yountville,CA&sensor=false>

.Information from URL : <http://maps.googleapis.com/maps/api/geocode/json?address=2520%20Camino%20Diablo,Walnut%20Cr.,CA&sensor=false>

.Information from URL : <http://maps.googleapis.com/maps/api/geocode/json?address=6015%20Steele%20Canyon%20Road,Sunnyvale,CA&sensor=false>

.Information from URL : <http://maps.googleapis.com/maps/api/geocode/json?address=360>

1%20Langtry%20Road,St.%20Helena,CA&sensor=false
.Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=175
0%20Dean%20York%20Lane,St.%20Helena,CA&sensor=false
.Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=144
3%20Silverado%20Trail,St.%20Helena,CA&sensor=false
Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=2849%
20St.%20Helena%20Highway%20N,St.%20Helena,CA&sensor=false
.Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=156
3%20St.%20Helena%20Hwy,St.%20Helena,CA&sensor=false
.Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=308
0%20Lower%20Chiles%20Valley,St.%20Helena,CA&sensor=false
.Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=402
8%20Spring%20Mountain%20Rd.,St.%20Helena,CA&sensor=false
.Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=292
9%20St.%20Helena%20Highway%20N,St.%20Helena,CA&sensor=false
.Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=120
0%20Dowdell%20Lane,St.%20Helena,CA&sensor=false
.Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=649%
20Main%20Streest,St.%20Helena,CA&sensor=false
.Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=514%
20Pratt%20Ave,St.%20Helena,CA&sensor=false
.Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=275%
20Mund%20Road,St.%20Helena,CA&sensor=false
.Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=111
1%20White%20Lane,St.%20Helena,CA&sensor=false
Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=8210%
20St.%20Helena%20Highway,St.%20Helena,CA&sensor=false
.Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=335
8%20St.%20Helena%20Hwy,St.%20Helena,CA&sensor=false
.Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=101
5%20Big%20Tree%20Road,St.%20Helena,CA&sensor=false
.Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=807%
20St.%20Helena%20Hwy%20S%20St.%201,St.%20Helena,CA&sensor=false
.Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=185
9%20Hillview%20Place,St.%20Helena,CA&sensor=false
.Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=124
1%20Adams%20Road%20St.%201045,St.%20Helena,CA&sensor=false
.Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=100
0%20Silverado%20Trail,St.%20Helena,CA&sensor=false
.Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=378
7%20Spring%20Mountain%20Rd,St.%20Helena,CA&sensor=false
.Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=277%
20St.%20Helena%20Hwy,St.%20Helena,CA&sensor=false
.Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=333
1%20St.%20Helena%20Highway,St.%20Helena,CA&sensor=false
Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=100%2
0Pratt%20Ave,St.%20Helena,CA&sensor=false
.Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=286
7%20N%20St.%20Helena%20Hwy,St.%20Helena,CA&sensor=false
.Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=280
5%20Spring%20Mountain%20Rd,St.%20Helena,CA&sensor=false
.Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=2190
2%20Madrona%20Ave,St.%20Helena,CA&sensor=false
.Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=119

0%20Vineland%20Ave,St.%20Helena,CA&sensor=false
.Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=345
0%20Sage%20Canyon%20Road,St.%20Helena,CA&sensor=false
.Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=402
2%20Spring%20Mountain%20Rd,St.%20Helena,CA&sensor=false
.Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=385%
20La%20Fata%20Street,St.%20Helena,CA&sensor=false
.Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=212
5%20Inglewood%20Ave,St.%20Helena,CA&sensor=false
.Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=348
0%20St.%20Helena%20Highway,St.%20Helena,CA&sensor=false
Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=4060%
20Spring%20Mountain%20Rd,St.%20Helena,CA&sensor=false
.Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=345%
20Lafata%20St%20Suite%20D,St.%20Helena,CA&sensor=false
.Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=131
0%20Conn%20Valley%20Road,St.%20Helena,CA&sensor=false
.Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=137
0%20Trancas%20Street%20number%20327,St.%20Helena,CA&sensor=false
.Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=401
5%20Spring%20Mountain%20Rd%20,St.%20Helena,CA&sensor=false
.Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=354
9%20Langtry%20Rd,St.%20Helena,CA&sensor=false
.Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=121
4%20Main%20Street,St.%20Helena,CA&sensor=false
.Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=397%
20Main%20Street,St.%20Helena,CA&sensor=false
.Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=329
1%20St.%20Helena%20Highway,St.%20Helena,CA&sensor=false
.Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=168
0%20Silverado%20Trail,St.%20Helena,CA&sensor=false
Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=2910%
20Lower%20Chiles%20Road,St.%20Helena,CA&sensor=false
.Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=279
8%20Spring%20Street,St.%20Helena,CA&sensor=false
.Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=352
2%20Silverado%20Trail,St.%20Helena,CA&sensor=false
.Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=324
1%20Ehlers%20Lane,St.%20Helena,CA&sensor=false
.Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=407
8%20Spring%20Mountain%20Rd.,St.%20Helena,CA&sensor=false
.Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=366
0%20Spring%20Mountain%20Road,St.%20Helena,CA&sensor=false
.Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=218%
20Zinfandel%20Lane,St.%20Helena,CA&sensor=false
.Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=402
4%20Spring%20Mountain%20Road,St.%20Helena,CA&sensor=false
.Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=451%
20Sanitarium%20Road,St.%20Helena,CA&sensor=false
.Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=293
0%20St.%20Helena%20Highway%20N,St.%20Helena,CA&sensor=false
Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=1185%
20Starr%20Ave,St.%20Helena,CA&sensor=false
.Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=584%

```

20Main%20Street,St.%20Helena,CA&sensor=false
## .Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=849%
20Zinfandel%20Lane,St.%20Helena,CA&sensor=false
## .Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=169
5%20St%20Helena%20Hwy,St.%20Helena,CA&sensor=false
## .Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=402
6%20Spring%20Mountain%20Road,St.%20Helena,CA&sensor=false
## .Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=1281
Lewelling%20Ln,St.%20Helena,CA&sensor=false
## .Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=378
0%20Spring%20Mountain%20Road,St.%20Helena,CA&sensor=false
## .Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=846
6%20St.%20Helena%20Highway,St.%20Helena,CA&sensor=false
## .Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=310
0%20Spring%20Mountain%20Rd.,St.%20Helena,CA&sensor=false
## .Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=140%
20Pine%20Place,St.%20Helena,CA&sensor=false
## .Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=750%2
0Chiles%20Ave,St.%20Helena,CA&sensor=false
## .Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=342
4%20Silverado%20Trail%20N,St.%20Helena,CA&sensor=false
## .Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=292
0%20Spring%20Mountain%20Rd%20number%20A,St.%20Helena,CA&sensor=false
## .Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=401
3%20Spring%20Mountain%20Road,St.%20Helena,CA&sensor=false
## .Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=690%
20Meadowood%20Lane,St.%20Helena,CA&sensor=false
## .Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=255%
20Long%20Ranch%20Road,St.%20Helena,CA&sensor=false
## .Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=773
0%20Silverado%20Trail,St.%20Helena,CA&sensor=false
## .Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=112
7%20Pope%20Street%20Ste.%20105,St.%20Helena,CA&sensor=false
## .Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=295
0%20Sage%20Canyon%20Road,St.%20Helena,CA&sensor=false
## .Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=215
3%20Sage%20Canyon%20Road,St.%20Helena,CA&sensor=false

```

```
head(logc)
```

```

##          lon      lat          address
## 1 -122.3466 38.42483 1465 yountville cross rd, yountville, ca 94599, usa
## 2 -122.3673 38.40650      6795 washington st, yountville, ca 94599, usa
## 3 -122.3549 38.40237      1883 carignan way, yountville, ca 94599, usa
## 4 -122.3673 38.40650      6795 washington st, yountville, ca 94599, usa
## 5 -122.3486 38.42262      1001 state ln, yountville, ca 94599, usa
## 6 -122.3662 38.40594      6740 washington st, yountville, ca 94599, usa

```

```

visit.wine$lon <- logc$lon
visit.wine$lat <- logc$lat

```

```
plot(visit.wine$lon,visit.wine$lat, data=visit.wine)
```

```
## Warning in plot.window(...): "data" is not a graphical parameter
```

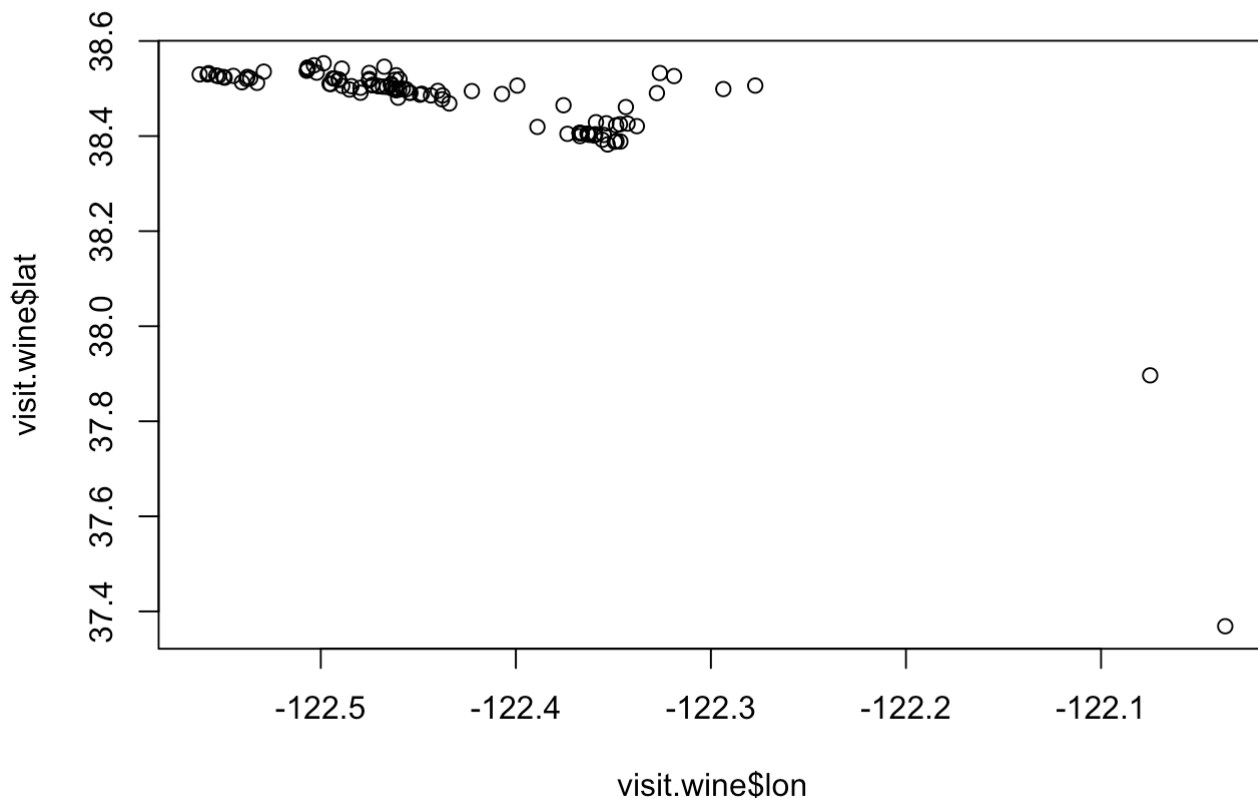
```
## Warning in plot.xy(xy, type, ...): "data" is not a graphical parameter
```

```
## Warning in axis(side = side, at = at, labels = labels, ...): "data" is not  
## a graphical parameter
```

```
## Warning in axis(side = side, at = at, labels = labels, ...): "data" is not  
## a graphical parameter
```

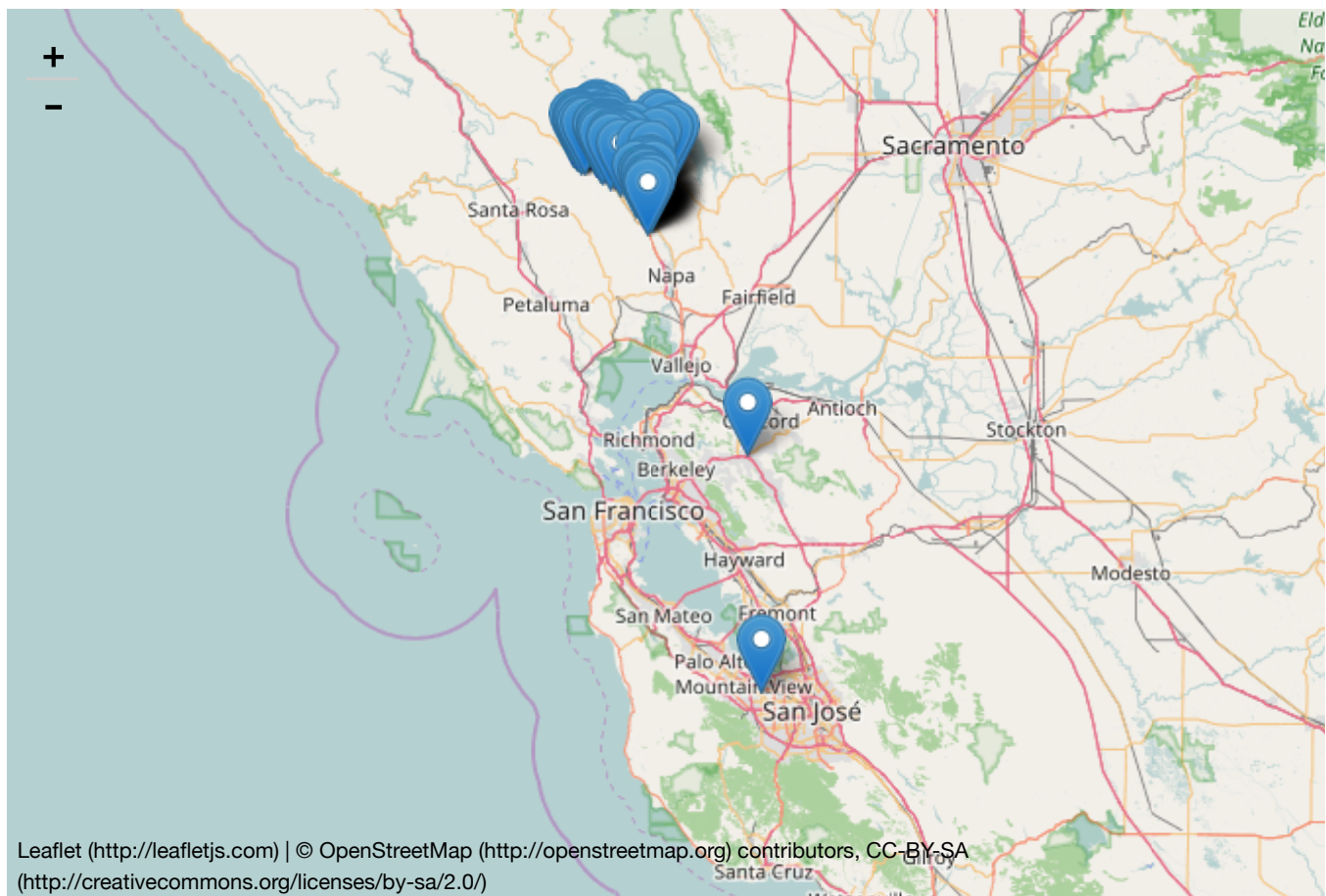
```
## Warning in box(...): "data" is not a graphical parameter
```

```
## Warning in title(...): "data" is not a graphical parameter
```



```
leaflet(data = visit.wine[,]) %>%  
  addTiles() %>%  
  addMarkers(~visit.wine$lon, ~visit.wine$lat, popup = ~as.character(Winery))
```





Part 2

Task 1

```
library(readxl)
walmart <- read_excel("~/Desktop/walmart.xls", sheet = 1, col_names = T, col_types = NULL,
  na = "")
walmart <- walmart[1:101,]
walmart$Address <- paste(walmart$STREETADDR, walmart$City, walmart$State, sep = ", ")
walmart$Address <- gsub("#", "Ste ", walmart$Address)
locg2 <- geocode(walmart$Address, output = "latlon", messaging = FALSE, source = "google")
```


Information from URL : <http://maps.googleapis.com/maps/api/geocode/json?address=61%20PLAZA%20DRIVE,%20KIMBALL,%20WV&sensor=false>

.Information from URL : <http://maps.googleapis.com/maps/api/geocode/json?address=1881%20ROBERT%20C.%20BYRD%20DRIVE,%20MAC%20ARTHUR,%20WV&sensor=false>

Information from URL : <http://maps.googleapis.com/maps/api/geocode/json?address=130%20COMMERCE%20STREET,%20LAKE%20DELTON,%20WI&sensor=false>

.Information from URL : [http://maps.googleapis.com/maps/api/geocode/json?address=R.R.Ste%201-BOX%20750\(WALMART%20PLAZA\),%20CRANBERRY,%20PA&sensor=false](http://maps.googleapis.com/maps/api/geocode/json?address=R.R.Ste%201-BOX%20750(WALMART%20PLAZA),%20CRANBERRY,%20PA&sensor=false)

.Information from URL : <http://maps.googleapis.com/maps/api/geocode/json?address=476999%20HIGHWAY%2095%20NORTH,%20PONDERAY,%20ID&sensor=false>

.Information from URL : <http://maps.googleapis.com/maps/api/geocode/json?address=320%20MALLARD%20LANE,%20MASON,%20WV&sensor=false>

.Information from URL : <http://maps.googleapis.com/maps/api/geocode/json?address=88%20HIGHLAND%20CROSSING,%20EAST%20ELLIJAY,%20GA&sensor=false>

Information from URL : <http://maps.googleapis.com/maps/api/geocode/json?address=1573%20MAIN%20STREET,%20PALMYRA,%20ME&sensor=false>

.Information from URL : <http://maps.googleapis.com/maps/api/geocode/json?address=258%20RIVER%20ROAD,%20MEXICO,%20ME&sensor=false>

.Information from URL : <http://maps.googleapis.com/maps/api/geocode/json?address=474%20BOSTON%20POST%20ROAD,%20NORTH%20WINDHAM,%20CT&sensor=false>

.Information from URL : <http://maps.googleapis.com/maps/api/geocode/json?address=742%20MAIN%20STREET,%20NORTH%20OXFORD,%20MA&sensor=false>

.Information from URL : <http://maps.googleapis.com/maps/api/geocode/json?address=219%20HIGHWAY%20412,%20ASH%20FLAT,%20AR&sensor=false>

.Information from URL : <http://maps.googleapis.com/maps/api/geocode/json?address=5741%20BUFFALO%20ROAD,%20HARBORCREEK,%20PA&sensor=false>

.Information from URL : <http://maps.googleapis.com/maps/api/geocode/json?address=690%20HIGHWAY%2078,%20SUMITON,%20AL&sensor=false>

.Information from URL : <http://maps.googleapis.com/maps/api/geocode/json?address=4540%20MAIN%20ST.%20B%203079,%20SHALLOTTE,%20NC&sensor=false>

.Information from URL : <http://maps.googleapis.com/maps/api/geocode/json?address=13001%20HWY%2090,%20BOUTTE,%20LA&sensor=false>

.Information from URL : <http://maps.googleapis.com/maps/api/geocode/json?address=1800%20W%20HWY%2070,%20RUIDOSO%20DOWNS,%20NM&sensor=false>

Information from URL : <http://maps.googleapis.com/maps/api/geocode/json?address=32225%20HIGHWAY%2079%20SOUTH,%20TEMECULA,%20CA&sensor=false>

.Information from URL : <http://maps.googleapis.com/maps/api/geocode/json?address=500%20TERRY%20RICH%20BLVD,%20SAINT%20CLAIR,%20PA&sensor=false>

.Information from URL : <http://maps.googleapis.com/maps/api/geocode/json?address=1850%20VETERANS%20MEMORIAL%20HWY,%20ISLANDIA,%20NY&sensor=false>

.Information from URL : <http://maps.googleapis.com/maps/api/geocode/json?address=1570%20CHESTER%20PIKE,%20CRUM%20LYNNE,%20PA&sensor=false>

.Information from URL : <http://maps.googleapis.com/maps/api/geocode/json?address=1608%20NORTH%20SWENSON,%20STAMFORD,%20TX&sensor=false>

.Information from URL : <http://maps.googleapis.com/maps/api/geocode/json?address=379%20SOUTH%20STREET,%20CALAIS,%20ME&sensor=false>

.Information from URL : <http://maps.googleapis.com/maps/api/geocode/json?address=100%20SOUTH%20RAGUS%20RD,%20CLAYPOOL,%20AZ&sensor=false>

.Information from URL : <http://maps.googleapis.com/maps/api/geocode/json?address=13320%20G.C.%20PEERY%20HWY,%20POUNDING%20MILL,%20VA&sensor=false>

.Information from URL : <http://maps.googleapis.com/maps/api/geocode/json?address=491%20MAIN%20STREET,%20GORHAM,%20NH&sensor=false>

.Information from URL : <http://maps.googleapis.com/maps/api/geocode/json?address=100%20MAIN%20STREET,%20GORHAM,%20NH&sensor=false>

20COMMERCIAL%20DRIVE,%20PINEVILLE,%20MO&sensor=false
Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=7065%
20NORTH%20INGRAM%20AVENUE,%20FRESNO,%20CA&sensor=false
.Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=567%
20ROUTE%20100%20NORTH,%20BECHTELSVILLE,%20PA&sensor=false
.Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=500%
20ROUTE%20940,%20MOUNT%20POCONO,%20PA&sensor=false
.Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=777%
20N%20MAIN,%20EPHRAIM,%20UT&sensor=false
.Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=333%
20EAST%20WALNUT,%20THAYER,%20MO&sensor=false
.Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=30%2
0WALNUT%20STREET,%20BRENT,%20AL&sensor=false
.Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=716
2%20HWY%201,%20MANSURA,%20LA&sensor=false
.Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=100%
20EAST%20I-240%20SERVICE%20ROAD,%20OKLAHOMA%20CITY,%20OK&sensor=false
.Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=235%
20RIDGEDALE%20AVENUE,%20CEDAR%20KNOLLS,%20NJ&sensor=false
.Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=2573
7%20US%20Rte%2011,%20EVANS%20MILLS,%20NY&sensor=false
Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=923%2
0WEST%2011%20STREET%20(HWY%209),%20HOBART,%20OK&sensor=false
.Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=200
0%20W%20MEMORIAL%20ROAD,%20OKLAHOMA%20CITY,%20OK&sensor=false
.Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=461%
20RT%2010%20LEDGEWOOD%20MALL%20Ste%2029,%20LEDGEWOOD,%20NJ&sensor=false
.Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=PINE
CREST%20PLAZA%20SHOPPING%20CTR,%20BRINKLEY,%20AR&sensor=false
.Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=171
1%20HWY%2010%20WEST,%20DILWORTH,%20MN&sensor=false
.Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=US%2
065%20SOUTH,%20MC%20GEHEE,%20AR&sensor=false
.Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=285%
20PLAINFIELD%20ROAD,%20WEST%20LEBANON,%20NH&sensor=false
.Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=140
5%20MIDDLE%20ROAD,%20FULTON,%20KY&sensor=false
.Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=671
1%20St%20Hwy%20135,%20MAYODAN,%20NC&sensor=false
.Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=201%
20WALTON%20ROAD,%20HARLAN,%20KY&sensor=false
Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=810%2
0SO.%2037TH%20ST.,%20BETHANY,%20MO&sensor=false
.Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=201%
20MONTGOMERY%20CROSSING,%20BISCOE,%20NC&sensor=false
.Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=18%2
0GEORGE'S%20FIELD,%20HINSDALE,%20NH&sensor=false
.Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=515%
20EAST%204TH%20STREET,%20WATKINS%20GLEN,%20NY&sensor=false
.Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=US%2
0HIGHWAY%2011,%20LIVINGSTON,%20AL&sensor=false
.Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=190
0%20WEST%20MAIN,%20CORNING,%20AR&sensor=false
.Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=337%

```
20N%20SUNSET,%20KENEDY,%20TX&sensor=false
```

```
## .Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=168%20WALMART%20DRIVE,%20FLIPPIN,%20AR&sensor=false
```

```
## .Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=3005%20CRANBERRY%20HWY%20(RT%206%20&%2028),%20EAST%20WAREHAM,%20MA&sensor=false
```

```
## Warning: geocode failed with status ZERO_RESULTS, location = "3005
```

```
## CRANBERRY HWY (RT 6 & 28), EAST WAREHAM, MA"
```

.Information from URL : <http://maps.googleapis.com/maps/api/geocode/json?address=1433%20SO.%20SAM%20HOUSTON%20BLVD,%20HOUSTON,%20MO&sensor=false>

Information from URL : <http://maps.googleapis.com/maps/api/geocode/json?address=929%20SOUTH%20PINE%20STREET,%20VIVIAN,%20LA&sensor=false>

.Information from URL : <http://maps.googleapis.com/maps/api/geocode/json?address=46%20NORTH%20SOUTH%20ROAD,%20NORTH%20CONWAY,%20NH&sensor=false>

.Information from URL : <http://maps.googleapis.com/maps/api/geocode/json?address=3310%20W%20GEORGIA%20STREET,%20LOUISIANA,%20MO&sensor=false>

.Information from URL : <http://maps.googleapis.com/maps/api/geocode/json?address=324%20WEST%20AGENCY%20ROAD,%20WEST%20BURLINGTON,%20IA&sensor=false>

.Information from URL : <http://maps.googleapis.com/maps/api/geocode/json?address=77%20NORMAN%20MORGAN%20BLVD,%20LOGAN,%20WV&sensor=false>

.Information from URL : <http://maps.googleapis.com/maps/api/geocode/json?address=1174%20PONY%20EXPRESS%20HWY,%20MARYSVILLE,%20KS&sensor=false>

.Information from URL : <http://maps.googleapis.com/maps/api/geocode/json?address=460%20HWY%2090,%20WAVELAND,%20MS&sensor=false>

.Information from URL : <http://maps.googleapis.com/maps/api/geocode/json?address=2305%20HWY%2067%20WEST,%20BALLINGER,%20TX&sensor=false>

.Information from URL : <http://maps.googleapis.com/maps/api/geocode/json?address=30%20MEMORIAL%20DRIVE,%20AVON,%20MA&sensor=false>

.Information from URL : <http://maps.googleapis.com/maps/api/geocode/json?address=8301%20NO.%20CHURCH%20ROAD,%20KANSAS%20CITY,%20MO&sensor=false>

Information from URL : <http://maps.googleapis.com/maps/api/geocode/json?address=840%20SUMMIT%20BLVD.,%20FRISCO,%20CO&sensor=false>

.Information from URL : <http://maps.googleapis.com/maps/api/geocode/json?address=16759%20HWY%203235,%20GALLIANO,%20LA&sensor=false>

.Information from URL : <http://maps.googleapis.com/maps/api/geocode/json?address=1210%20GIANT%20DRIVE,%20BLUE%20EARTH,%20MN&sensor=false>

.Information from URL : <http://maps.googleapis.com/maps/api/geocode/json?address=350%20E.%20FAIRMOUNT%20AVE,%20LAKEWOOD,%20NY&sensor=false>

.Information from URL : <http://maps.googleapis.com/maps/api/geocode/json?address=621%20EAST%20LAKE%20STREET,%20TAWAS%20CITY,%20MI&sensor=false>

.Information from URL : <http://maps.googleapis.com/maps/api/geocode/json?address=683%20TENNEY%20MOUNTAIN%20HIGHWAY,%20PLYMOUTH,%20NH&sensor=false>

.Information from URL : <http://maps.googleapis.com/maps/api/geocode/json?address=8700%20ANDERMATT%20DRIVE,%20LINCOLN,%20NE&sensor=false>

.Information from URL : <http://maps.googleapis.com/maps/api/geocode/json?address=2207%20IOWA,%20HIAWATHA,%20KS&sensor=false>

.Information from URL : <http://maps.googleapis.com/maps/api/geocode/json?address=1134%20WICKER%20STREET,%20TICONDEROGA,%20NY&sensor=false>

.Information from URL : <http://maps.googleapis.com/maps/api/geocode/json?address=Ste%2015%20HALS%20PLAZA%20DR,%20PIEDMONT,%20MO&sensor=false>

Information from URL : <http://maps.googleapis.com/maps/api/geocode/json?address=69%20PROSPECT%20HILL%20ROAD,%20EAST%20WINDSOR,%20CT&sensor=false>

.Information from URL : <http://maps.googleapis.com/maps/api/geocode/json?address=2204%20HWY%2082%20WEST,%20CLARKSVILLE,%20TX&sensor=false>

.Information from URL : <http://maps.googleapis.com/maps/api/geocode/json?address=1501%20K%20STREET,%20FAIRBURY,%20NE&sensor=false>

.Information from URL : <http://maps.googleapis.com/maps/api/geocode/json?address=1123%20HIGHWAY%2079%20/%20167%20BYPASS,%20FORDYCE,%20AR&sensor=false>

.Information from URL : <http://maps.googleapis.com/maps/api/geocode/json?address=3770%20SOUTH%20HIGHWAY%20395,%20CARSON%20CITY,%20NV&sensor=false>

.Information from URL : <http://maps.googleapis.com/maps/api/geocode/json?address=112>

```

6%20HIGHWAY%2038%20NORTH,%20TIPTON,%20IA&sensor=false
## .Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=160
8%20W.%20MAGNOLIA%20AVE.,%20GENEVA,%20AL&sensor=false
## .Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=US%2
060,%20HARDINSBURG,%20KY&sensor=false
## .Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=221
2%20GLACIER%20DRIVE,%20SAINT%20CROIX%20FALLS,%20WI&sensor=false
## .Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=100
7%20NORTH%20DOUGLAS,%20MALDEN,%20MO&sensor=false
## Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=2700%
20CENTRAL%20FREEWAY,%20WICHITA%20FALLS,%20TX&sensor=false
## .Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=101%
20W%20HIGHWAY%2060,%20MOUNTAIN%20VIEW,%20MO&sensor=false
## .Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=337%
20RUSSELL%20STREET,%20HADLEY,%20MA&sensor=false
## .Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=192
0%20SOUTH%20ARKANSAS,%20SPRINGHILL,%20LA&sensor=false
## .Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=772
5%20HOKE%20ROAD,%20CLAYTON,%20OH&sensor=false
## .Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=170
1%20WEST%20133RD%20STREET,%20KANSAS%20CITY,%20MO&sensor=false
## .Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=297
0%20MILITARY%20AVENUE,%20BAXTER%20SPRINGS,%20KS&sensor=false
## .Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=780%
20COMMONWEALTH%20DRIVE,%20NORTON,%20VA&sensor=false
## .Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=750%
20US%20HWY%20202,%20RINDGE,%20NH&sensor=false
## .Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=141
0%20E.%20MAIN%20ST.,%20EASTLAND,%20TX&sensor=false
## Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=160%2
0KINTER%20WAY,%20PEARISBURG,%20VA&sensor=false
## .Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=228
1%20WEST%20190%20NO%20HWY%2070,%20THATCHER,%20AZ&sensor=false
## .Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=216
0%20COMMERCE%20ROAD,%20GOODLAND,%20KS&sensor=false
## Information from URL : http://maps.googleapis.com/maps/api/geocode/json?address=100%2
0MCGINNIS%20DRIVE,%20WAYNE,%20WV&sensor=false

```

```

walmart$lon <- locg2$lon
walmart$lat <- locg2$lat

```

Task 2

```
plot(walmart$lon,walmart$lat, data=walmart)
```

```
## Warning in plot.window(...): "data" is not a graphical parameter
```

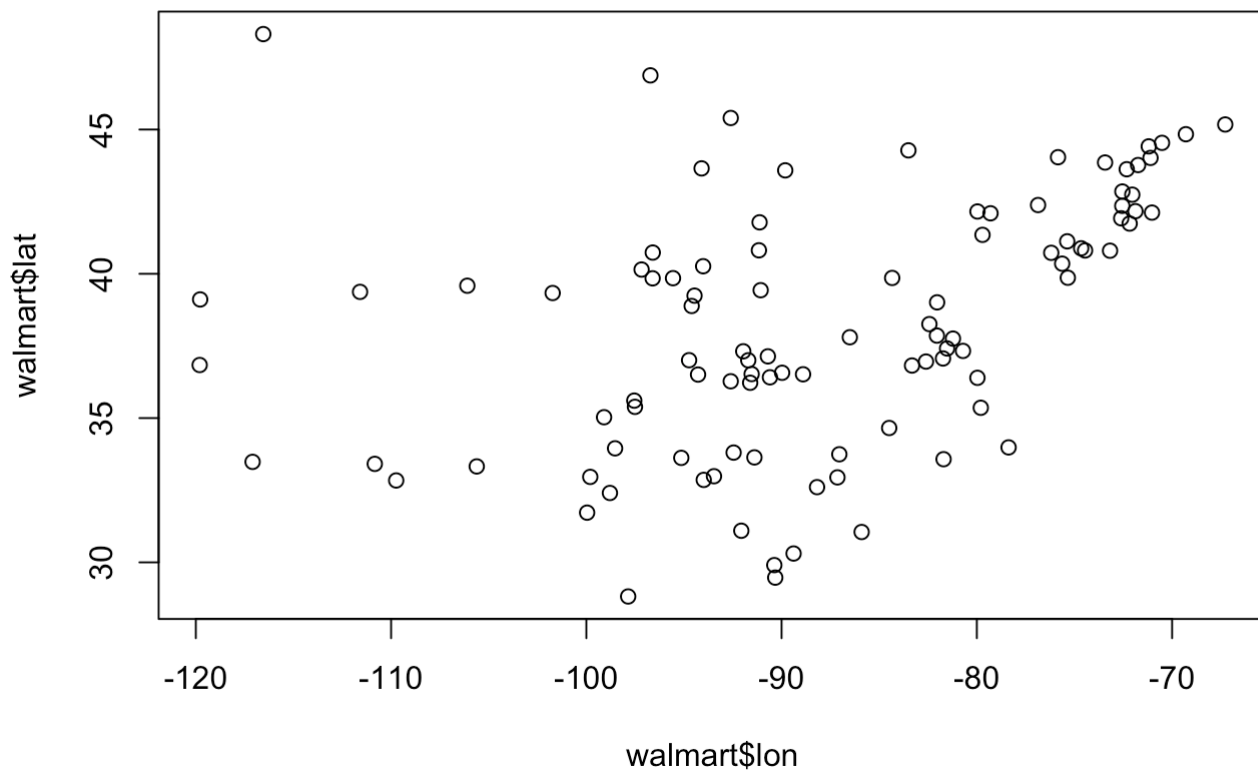
```
## Warning in plot.xy(xy, type, ...): "data" is not a graphical parameter
```

```
## Warning in axis(side = side, at = at, labels = labels, ...): "data" is not  
## a graphical parameter
```

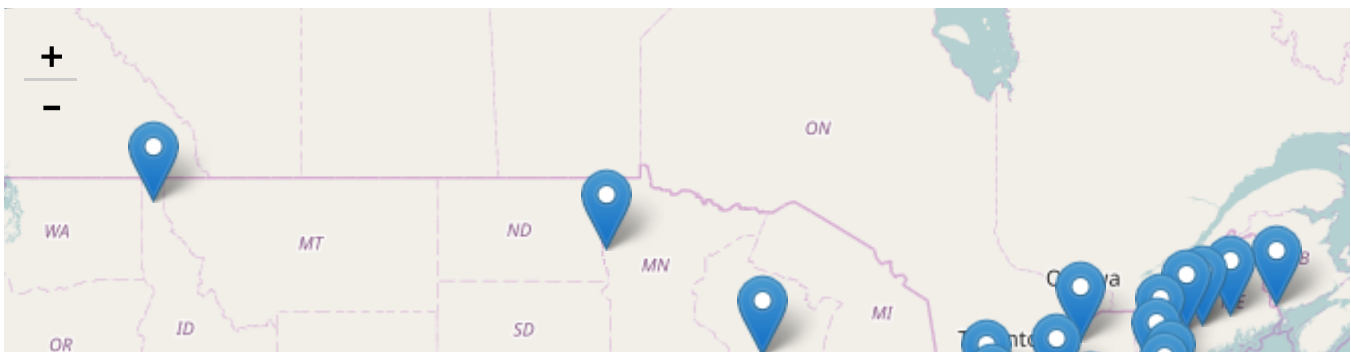
```
## Warning in axis(side = side, at = at, labels = labels, ...): "data" is not  
## a graphical parameter
```

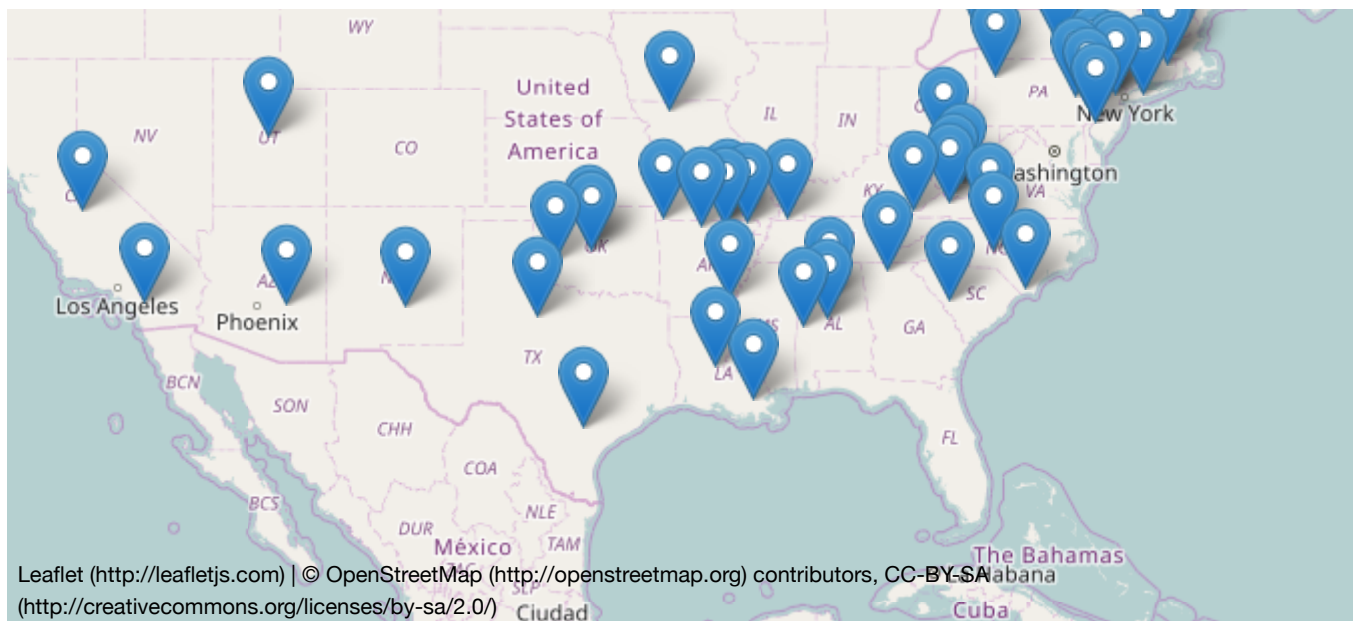
```
## Warning in box(...): "data" is not a graphical parameter
```

```
## Warning in title(...): "data" is not a graphical parameter
```



```
leaflet(data = walmart[,]) %>%  
  addTiles() %>%  
  addMarkers(~walmart$lon, ~walmart$lat, popup = ~as.character(storenum))
```





Part 3

Task 1

```
library(ggmap)
library(leaflet)
mcdonalds <- read_excel("~/Desktop/Mcdonalds_USA.xls",sheet = 1, col_names = T,col_types
  = NULL, na="")
mcdonalds <- mcdonalds[1:101,]
head(mcdonalds,n=100)
```

##	longitude	latitude	store
## 1	-149.86831	61.14013	McDonalds [WM]-Anchorage,AK
## 2	-149.88113	61.19243	McDonalds [WM]-Anchorage,AK
## 3	-149.89863	61.19475	McDonalds-Anchorage,AK
## 4	-149.87056	61.18835	McDonalds-Anchorage,AK
## 5	-149.86325	61.13988	McDonalds-Anchorage,AK
## 6	-149.85796	61.10844	McDonalds-Anchorage,AK
## 7	-149.83232	61.18121	McDonalds-Anchorage,AK
## 8	-149.82363	61.21935	McDonalds-Anchorage,AK
## 9	-149.77509	61.20936	McDonalds-Anchorage,AK
## 10	-149.73271	61.22137	McDonalds-Anchorage,AK
## 11	-149.97996	61.17302	McDonalds-Anchorage,AK
## 12	-149.95083	61.13706	McDonalds PlayPlace-Anchorage,AK
## 13	-149.93678	61.18152	McDonalds PlayPlace-Anchorage,AK
## 14	-149.83509	61.13820	McDonalds PlayPlace-Anchorage,AK
## 15	-149.73272	61.19285	McDonalds PlayPlace-Anchorage,AK
## 16	-149.57115	61.32703	McDonalds PlayPlace-Eagle River,AK
## 17	-147.75911	64.83730	McDonalds PlayPlace-Fairbanks,AK
## 18	-147.69661	64.85938	McDonalds PlayPlace-Fairbanks,AK
## 19	-147.82012	64.84873	McDonalds PlayPlace-Fairbanks,AK
## 20	-151.52306	59.64270	McDonalds-Homer,AK
## 21	-151.23591	60.55984	McDonalds PlayPlace-Kenai,AK
## 22	-147.35142	64.75807	McDonalds PlayPlace-North Pole,AK
## 23	-149.12366	61.59902	McDonalds-Palmer,AK
## 24	-151.07100	60.48309	McDonalds-Soldotna,AK
## 25	-149.36409	61.56927	McDonalds [WM]-Wasilla,AK
## 26	-149.43090	61.58143	McDonalds PlayPlace-Wasilla,AK
## 27	-86.96323	33.61071	McDonalds PlayPlace-Adamsville,AL
## 28	-86.80522	33.22832	McDonalds-Alabaster,AL
## 29	-86.81177	33.26258	McDonalds PlayPlace-Alabaster,AL
## 30	-86.20708	34.27670	McDonalds PlayPlace-Albertville,AL
## 31	-85.95846	32.92119	McDonalds PlayPlace-Alexander City,AL
## 32	-86.39416	34.11883	McDonalds-Altoona,AL
## 33	-86.51839	31.27594	McDonalds-Andalusia,AL
## 34	-85.82663	33.66911	McDonalds PlayPlace-Anniston,AL
## 35	-85.81804	33.71946	McDonalds PlayPlace-Anniston,AL
## 36	-85.78884	33.62910	McDonalds PlayPlace-Anniston,AL
## 37	-86.50283	34.32584	McDonalds PlayPlace-Arab,AL
## 38	-86.84025	34.99181	McDonalds PlayPlace-Ardmore,AL
## 39	-85.82625	33.27559	McDonalds PlayPlace-Ashland,AL
## 40	-86.95088	34.80485	McDonalds-Athens,AL
## 41	-86.93826	34.78282	McDonalds PlayPlace-Athens,AL
## 42	-87.49385	31.00651	McDonalds PlayPlace-Atmore,AL
## 43	-86.07735	34.01812	McDonalds PlayPlace-Attalla,AL
## 44	-85.48354	32.60663	McDonalds-Auburn,AL
## 45	-85.50520	32.56097	McDonalds PlayPlace-Auburn,AL
## 46	-85.44573	32.62495	McDonalds PlayPlace-Auburn,AL
## 47	-87.78384	30.87913	McDonalds-Bay Minette,AL
## 48	-86.92224	33.33711	McDonalds-Bessemer,AL
## 49	-86.99860	33.36264	McDonalds PlayPlace-Bessemer,AL
## 50	-86.96937	33.39583	McDonalds PlayPlace-Bessemer,AL
## 51	-86.60400	33.62097	McDonalds [WM]-Birmingham,AL
## 52	-86.68185	33.41874	McDonalds [WM]-Birmingham,AL

## 53	-86.69884	33.58860	McDonalds [WM]-Birmingham,AL
## 54	-86.84708	33.50003	McDonalds-Birmingham,AL
## 55	-86.83970	33.48048	McDonalds-Birmingham,AL
## 56	-86.82769	33.54057	McDonalds-Birmingham,AL
## 57	-86.81908	33.55394	McDonalds-Birmingham,AL
## 58	-86.80779	33.50465	McDonalds-Birmingham,AL
## 59	-86.80019	33.53363	McDonalds-Birmingham,AL
## 60	-86.79087	33.49071	McDonalds-Birmingham,AL
## 61	-86.78817	33.50977	McDonalds-Birmingham,AL
## 62	-86.74863	33.54354	McDonalds-Birmingham,AL
## 63	-86.68365	33.63668	McDonalds-Birmingham,AL
## 64	-86.89285	33.56157	McDonalds PlayPlace-Birmingham,AL
## 65	-86.87868	33.49530	McDonalds PlayPlace-Birmingham,AL
## 66	-86.73994	33.38369	McDonalds PlayPlace-Birmingham,AL
## 67	-86.72150	33.52553	McDonalds PlayPlace-Birmingham,AL
## 68	-86.81150	33.52029	McDonalds PlayPlace-Birmingham,AL
## 69	-86.69656	33.58819	McDonalds PlayPlace-Birmingham,AL
## 70	-86.15069	34.19869	McDonalds PlayPlace-Boaz,AL
## 71	-87.07977	31.09949	McDonalds PlayPlace-Brewton,AL
## 72	-86.95276	33.42752	McDonalds-Brighton,AL
## 73	-86.74985	33.14685	McDonalds PlayPlace-Calera,AL
## 74	-85.66817	34.16015	McDonalds PlayPlace-Centre,AL
## 75	-87.14207	32.94485	McDonalds PlayPlace-Centreville,AL
## 76	-86.63385	33.34814	McDonalds PlayPlace-Chelsea,AL
## 77	-86.35069	33.26488	McDonalds PlayPlace-Childersburg,AL
## 78	-86.60887	32.81881	McDonalds-Clanton,AL
## 79	-86.57607	32.80110	McDonalds PlayPlace-Clanton,AL
## 80	-86.61589	33.17985	McDonalds PlayPlace-Columbiana,AL
## 81	-87.44804	33.17606	McDonalds PlayPlace-Cottondale,AL
## 82	-86.87543	34.20702	McDonalds-Cullman,AL
## 83	-86.83668	34.16290	McDonalds-Cullman,AL
## 84	-85.73031	32.82105	McDonalds PlayPlace-Dadeville,AL
## 85	-85.71279	31.30934	McDonalds-Daleville,AL
## 86	-87.91231	30.64960	McDonalds-Daphne,AL
## 87	-87.90151	30.60390	McDonalds-Daphne,AL
## 88	-87.01302	34.57255	McDonalds-Decatur,AL
## 89	-86.98017	34.58920	McDonalds-Decatur,AL
## 90	-86.90870	34.53590	McDonalds PlayPlace-Decatur,AL
## 91	-87.83765	32.50487	McDonalds PlayPlace-Demopolis,AL
## 92	-86.88397	34.04157	McDonalds-Dodge City,AL
## 93	-87.06599	33.75933	McDonalds PlayPlace-Dora,AL
## 94	-85.40020	31.22511	McDonalds-Dothan,AL
## 95	-85.39758	31.18968	McDonalds-Dothan,AL
## 96	-85.36078	31.21709	McDonalds-Dothan,AL
## 97	-85.42768	31.24592	McDonalds PlayPlace-Dothan,AL
## 98	-85.38914	31.25415	McDonalds PlayPlace-Dothan,AL
## 99	-86.90779	33.49959	McDonalds PlayPlace-Ensley,AL
## 100	-85.86459	31.33361	McDonalds [WM]-Enterprise,AL
##			address
## 1	8900 Old Seward Hwy [WM],	Anchorage,AK, (907) 344-5831	
## 2	3101 A St [WM],	Anchorage,AK, (907) 561-5137	
## 3	800 W Northern Lights Blvd,	Anchorage,AK, (907) 561-5525	
## 4	701 E 36th Ave,	Anchorage,AK, (907) 563-0658	
## 5	8915 Old Seward Hwy,	Anchorage,AK, (907) 344-4231	

## 6	1320 Huffman Rd, Anchorage,AK,	(907) 345-5932
## 7	2601 E Tudor Rd, Anchorage,AK,	(907) 562-2108
## 8	3006 Mountain View Dr, Anchorage,AK,	(907) 274-5686
## 9	5716 Debarr Rd, Anchorage,AK,	(907) 333-0413
## 10	255 Muldoon Rd, Anchorage,AK,	(907) 337-0810
## 11	5000 W International Airport Rd, Anchorage,AK,	(907) 243-0085
## 12	3828 W Dimond Blvd, Anchorage,AK,	(907) 248-0597
## 13	4350 Spenard Rd, Anchorage,AK,	(907) 243-5122
## 14	9100 Lake Otis Pky, Anchorage,AK,	(907) 349-0285
## 15	3035 Muldoon Rd, Anchorage,AK,	(907) 338-7377
## 16	11808 Old Glenn Hwy, Eagle River,AK,	(907) 694-4500
## 17	1930 Airport Way, Fairbanks,AK,	(907) 452-4600
## 18	449 Harold Bentley Ave, Fairbanks,AK,	(907) 451-0770
## 19	3905 Geist Rd, Fairbanks,AK,	(907) 474-2010
## 20	3656 Ben Walters Ln, Homer,AK,	(907) 235-5400
## 21	10447 Kenai Spur Hwy, Kenai,AK,	(907) 283-4008
## 22	352 N Santa Claus Ln, North Pole,AK,	(907) 488-7779
## 23	600 W Daron Dr, Palmer,AK,	(907) 746-0335
## 24	44420 Sterling Hwy, Soldotna,AK,	(907) 262-1074
## 25	1350 S Seward Meridian [WM], Wasilla,AK,	(907) 373-2523
## 26	801 E Parks Hwy, Wasilla,AK,	(907) 376-4433
## 27	5721 Veterans Memorial Pkwy, Adamsville,AL,	(205) 674-7288
## 28	205 S Colonial Dr, Alabaster,AL,	(205) 621-2805
## 29	1499 1st St N, Alabaster,AL,	(205) 664-3761
## 30	7375 Us Hwy 431, Albertville,AL,	(256) 878-6755
## 31	4094 Highway 280, Alexander City,AL,	(256) 329-1283
## 32	87134 Us Hwy 278, Altoona,AL,	(205) 466-5211
## 33	315 W Byp, Andalusia,AL,	(334) 222-7875
## 34	1901 Quintard Ave, Anniston,AL,	(256) 236-5224
## 35	5550 Mcclellan Blvd, Anniston,AL,	(256) 820-0038
## 36	3424 Greenbrier Dear Dr, Anniston,AL,	(256) 832-4543
## 37	700 N Brandlee Pkwy, Arab,AL,	(256) 586-8792
## 38	26862 Main St, Ardmore,AL,	(256) 423-3663
## 39	83690 Hwy 9, Ashland,AL,	(256) 354-2339
## 40	103 Us 31 N, Athens,AL,	(256) 233-1275
## 41	1529 Us 72 E, Athens,AL,	(256) 232-1927
## 42	1414 S Main St, Atmore,AL,	(251) 368-2267
## 43	610 Cleveland Ave, Attalla,AL,	(256) 538-1107
## 44	224 West Magnolia Ave, Auburn,AL,	(334) 821-7185
## 45	2372 College St, Auburn,AL,	(334) 502-8900
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## 48	1195 Greenmor Dr, Bessemer,AL,	(205) 425-6200
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## 51	5919 Trussville Crossing [WM], Birmingham,AL,	(205) 661-0225
## 52	Hwy US 280 [WM], Birmingham,AL,	(205) 980-4948
## 53	9248 Parkway E [WM], Birmingham,AL,	(205) 833-9665
## 54	732 Lomb Ave Sw, Birmingham,AL,	(205) 787-6245
## 55	801 Dennison Ave, Birmingham,AL,	(205) 323-5387
## 56	1700 Finley Blvd, Birmingham,AL,	(205) 254-3646
## 57	3220 26th St N, Birmingham,AL,	(205) 324-8945
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## 60      2001 Montgomery Hwy, Birmingham,AL, (205) 930-9777
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## 73      706 Supercenter Dr, Calera,AL, (205) 668-7588
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## 82      6065 Al Highway 157, Cullman,AL, (256) 734-4258
## 83      1425 2nd Ave Sw, Cullman,AL, (256) 734-4073
## 84      17956 Highway 280, Dadeville,AL, (256) 825-8744
## 85      575 N Daleville Ave, Daleville,AL, (334) 598-6072
## 86      29138 Us 98, Daphne,AL, (251) 621-3596
## 87      29919 Woodrow Lane, Daphne,AL, (251) 626-9909
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## 89      1208 6th Ave Se, Decatur,AL, (256) 353-8911
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## 91      1111 Walnut St, Demopolis,AL, (334) 289-3069
## 92      231 Hwy 69 S, Dodge City,AL, (256) 287-9543
## 93      2445 Hwy 78, Dora,AL, (205) 648-3673
## 94      619 W Main St, Dothan,AL, (334) 793-1625
## 95      2101 Ross Clark Cir, Dothan,AL, (334) 794-0221
## 96      1081 Ross Clark Cir, Dothan,AL, (334) 677-0779
## 97      3520 Ross Clark Cir, Dothan,AL, (334) 792-0313
## 98      2251 Reeves St, Dothan,AL, (334) 702-8338
## 99      3520 Avenue E, Ensley,AL, (205) 780-4146
## 100     600 Boll Weevil Circle [WM], Enterprise,AL, (334) 393-6679
```

```
plot(mcdonalds$longitude,mcdonalds$latitude, data=mcdonalds)
```

```
## Warning in plot.window(...): "data" is not a graphical parameter
```

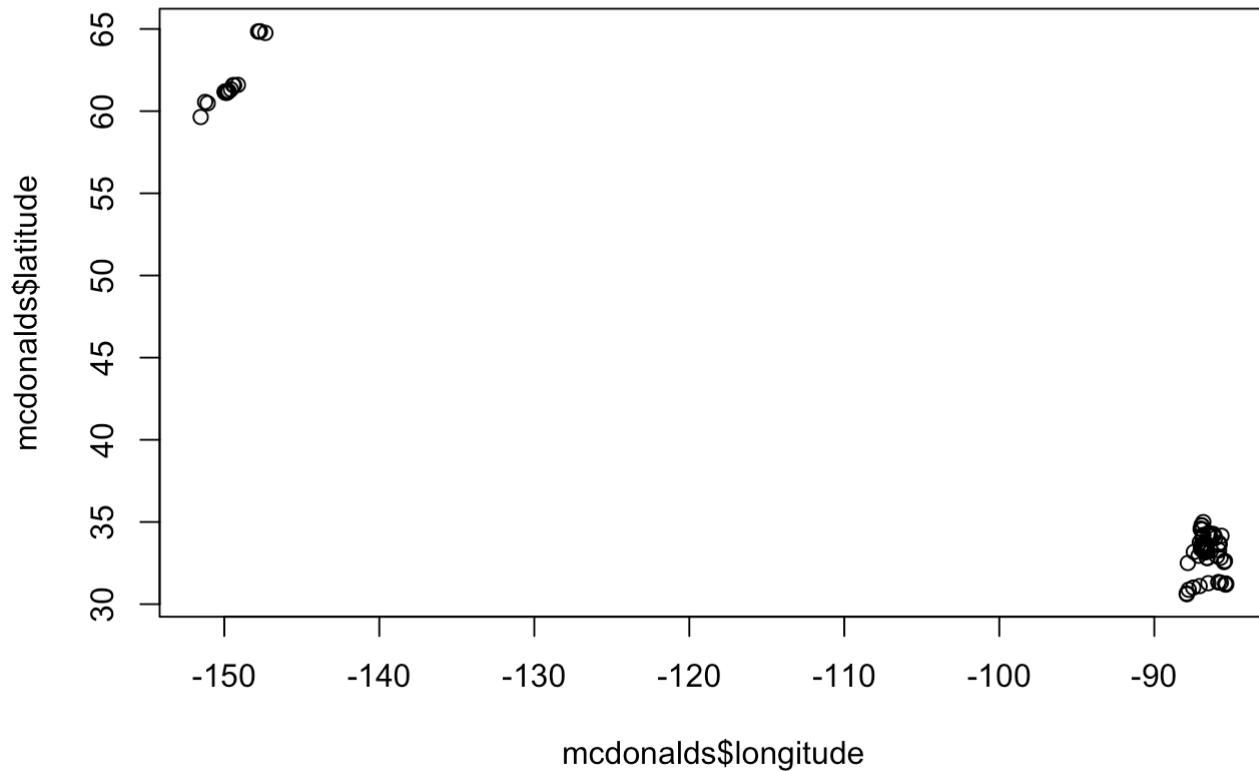
```
## Warning in plot.xy(xy, type, ...): "data" is not a graphical parameter
```

```
## Warning in axis(side = side, at = at, labels = labels, ...): "data" is not
## a graphical parameter
```

```
## Warning in axis(side = side, at = at, labels = labels, ...): "data" is not  
## a graphical parameter
```

```
## Warning in box(...): "data" is not a graphical parameter
```

```
## Warning in title(...): "data" is not a graphical parameter
```



```
leaflet(data = mcdonalds[,]) %>%  
  addTiles() %>%  
  addMarkers(~mcdonalds$longitude, ~mcdonalds$latitude, popup = ~as.character(store))
```


##	longitude	latitude	store
## 1	-149.86831	61.14013	McDonalds [WM]-Anchorage,AK
## 2	-149.88113	61.19243	McDonalds [WM]-Anchorage,AK
## 3	-149.89863	61.19475	McDonalds-Anchorage,AK
## 4	-149.87056	61.18835	McDonalds-Anchorage,AK
## 5	-149.86325	61.13988	McDonalds-Anchorage,AK
## 6	-149.85796	61.10844	McDonalds-Anchorage,AK
## 7	-149.83232	61.18121	McDonalds-Anchorage,AK
## 8	-149.82363	61.21935	McDonalds-Anchorage,AK
## 9	-149.77509	61.20936	McDonalds-Anchorage,AK
## 10	-149.73271	61.22137	McDonalds-Anchorage,AK
## 11	-149.97996	61.17302	McDonalds-Anchorage,AK
## 12	-149.95083	61.13706	McDonalds PlayPlace-Anchorage,AK
## 13	-149.93678	61.18152	McDonalds PlayPlace-Anchorage,AK
## 14	-149.83509	61.13820	McDonalds PlayPlace-Anchorage,AK
## 15	-149.73272	61.19285	McDonalds PlayPlace-Anchorage,AK
## 16	-149.57115	61.32703	McDonalds PlayPlace-Eagle River,AK
## 17	-147.75911	64.83730	McDonalds PlayPlace-Fairbanks,AK
## 18	-147.69661	64.85938	McDonalds PlayPlace-Fairbanks,AK
## 19	-147.82012	64.84873	McDonalds PlayPlace-Fairbanks,AK
## 20	-151.52306	59.64270	McDonalds-Homer,AK
## 21	-151.23591	60.55984	McDonalds PlayPlace-Kenai,AK
## 22	-147.35142	64.75807	McDonalds PlayPlace-North Pole,AK
## 23	-149.12366	61.59902	McDonalds-Palmer,AK
## 24	-151.07100	60.48309	McDonalds-Soldotna,AK
## 25	-149.36409	61.56927	McDonalds [WM]-Wasilla,AK
## 26	-149.43090	61.58143	McDonalds PlayPlace-Wasilla,AK
## 27	-86.96323	33.61071	McDonalds PlayPlace-Adamsville,AL
## 28	-86.80522	33.22832	McDonalds-Alabaster,AL
## 29	-86.81177	33.26258	McDonalds PlayPlace-Alabaster,AL
## 30	-86.20708	34.27670	McDonalds PlayPlace-Albertville,AL
## 31	-85.95846	32.92119	McDonalds PlayPlace-Alexander City,AL
## 32	-86.39416	34.11883	McDonalds-Altoona,AL
## 33	-86.51839	31.27594	McDonalds-Andalusia,AL
## 34	-85.82663	33.66911	McDonalds PlayPlace-Anniston,AL
## 35	-85.81804	33.71946	McDonalds PlayPlace-Anniston,AL
## 36	-85.78884	33.62910	McDonalds PlayPlace-Anniston,AL
## 37	-86.50283	34.32584	McDonalds PlayPlace-Arab,AL
## 38	-86.84025	34.99181	McDonalds PlayPlace-Ardmore,AL
## 39	-85.82625	33.27559	McDonalds PlayPlace-Ashland,AL
## 40	-86.95088	34.80485	McDonalds-Athens,AL
## 41	-86.93826	34.78282	McDonalds PlayPlace-Athens,AL
## 42	-87.49385	31.00651	McDonalds PlayPlace-Atmore,AL
## 43	-86.07735	34.01812	McDonalds PlayPlace-Attalla,AL
## 44	-85.48354	32.60663	McDonalds-Auburn,AL
## 45	-85.50520	32.56097	McDonalds PlayPlace-Auburn,AL
## 46	-85.44573	32.62495	McDonalds PlayPlace-Auburn,AL
## 47	-87.78384	30.87913	McDonalds-Bay Minette,AL
## 48	-86.92224	33.33711	McDonalds-Bessemer,AL
## 49	-86.99860	33.36264	McDonalds PlayPlace-Bessemer,AL
## 50	-86.96937	33.39583	McDonalds PlayPlace-Bessemer,AL
## 51	-86.60400	33.62097	McDonalds [WM]-Birmingham,AL
## 52	-86.68185	33.41874	McDonalds [WM]-Birmingham,AL

## 53	-86.69884	33.58860	McDonalds [WM]-Birmingham,AL
## 54	-86.84708	33.50003	McDonalds-Birmingham,AL
## 55	-86.83970	33.48048	McDonalds-Birmingham,AL
## 56	-86.82769	33.54057	McDonalds-Birmingham,AL
## 57	-86.81908	33.55394	McDonalds-Birmingham,AL
## 58	-86.80779	33.50465	McDonalds-Birmingham,AL
## 59	-86.80019	33.53363	McDonalds-Birmingham,AL
## 60	-86.79087	33.49071	McDonalds-Birmingham,AL
## 61	-86.78817	33.50977	McDonalds-Birmingham,AL
## 62	-86.74863	33.54354	McDonalds-Birmingham,AL
## 63	-86.68365	33.63668	McDonalds-Birmingham,AL
## 64	-86.89285	33.56157	McDonalds PlayPlace-Birmingham,AL
## 65	-86.87868	33.49530	McDonalds PlayPlace-Birmingham,AL
## 66	-86.73994	33.38369	McDonalds PlayPlace-Birmingham,AL
## 67	-86.72150	33.52553	McDonalds PlayPlace-Birmingham,AL
## 68	-86.81150	33.52029	McDonalds PlayPlace-Birmingham,AL
## 69	-86.69656	33.58819	McDonalds PlayPlace-Birmingham,AL
## 70	-86.15069	34.19869	McDonalds PlayPlace-Boaz,AL
## 71	-87.07977	31.09949	McDonalds PlayPlace-Brewton,AL
## 72	-86.95276	33.42752	McDonalds-Brighton,AL
## 73	-86.74985	33.14685	McDonalds PlayPlace-Calera,AL
## 74	-85.66817	34.16015	McDonalds PlayPlace-Centre,AL
## 75	-87.14207	32.94485	McDonalds PlayPlace-Centreville,AL
## 76	-86.63385	33.34814	McDonalds PlayPlace-Chelsea,AL
## 77	-86.35069	33.26488	McDonalds PlayPlace-Childersburg,AL
## 78	-86.60887	32.81881	McDonalds-Clanton,AL
## 79	-86.57607	32.80110	McDonalds PlayPlace-Clanton,AL
## 80	-86.61589	33.17985	McDonalds PlayPlace-Columbiana,AL
## 81	-87.44804	33.17606	McDonalds PlayPlace-Cottondale,AL
## 82	-86.87543	34.20702	McDonalds-Cullman,AL
## 83	-86.83668	34.16290	McDonalds-Cullman,AL
## 84	-85.73031	32.82105	McDonalds PlayPlace-Dadeville,AL
## 85	-85.71279	31.30934	McDonalds-Daleville,AL
## 86	-87.91231	30.64960	McDonalds-Daphne,AL
## 87	-87.90151	30.60390	McDonalds-Daphne,AL
## 88	-87.01302	34.57255	McDonalds-Decatur,AL
## 89	-86.98017	34.58920	McDonalds-Decatur,AL
## 90	-86.90870	34.53590	McDonalds PlayPlace-Decatur,AL
## 91	-87.83765	32.50487	McDonalds PlayPlace-Demopolis,AL
## 92	-86.88397	34.04157	McDonalds-Dodge City,AL
## 93	-87.06599	33.75933	McDonalds PlayPlace-Dora,AL
## 94	-85.40020	31.22511	McDonalds-Dothan,AL
## 95	-85.39758	31.18968	McDonalds-Dothan,AL
## 96	-85.36078	31.21709	McDonalds-Dothan,AL
## 97	-85.42768	31.24592	McDonalds PlayPlace-Dothan,AL
## 98	-85.38914	31.25415	McDonalds PlayPlace-Dothan,AL
## 99	-86.90779	33.49959	McDonalds PlayPlace-Ensley,AL
## 100	-85.86459	31.33361	McDonalds [WM]-Enterprise,AL
##			address
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## 2	3101 A St [WM],	Anchorage,AK, (907) 561-5137	
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## 96      1081 Ross Clark Cir, Dothan,AL, (334) 677-0779
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## 99      3520 Avenue E, Ensley,AL, (205) 780-4146
## 100     600 Boll Weevil Circle [WM], Enterprise,AL, (334) 393-6679
```

```
## Warning in plot.window(...): "data" is not a graphical parameter
```

```
## Warning in plot.xy(xy, type, ...): "data" is not a graphical parameter
```

```
## Warning in axis(side = side, at = at, labels = labels, ...): "data" is not
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```

```
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```

```
## Warning in box(...): "data" is not a graphical parameter
```

```
## Warning in title(...): "data" is not a graphical parameter
```

