```r
 1   library(dplyr)
 2   library(lubridate)
 3   library(readr)
 4   library(ggplot2)
 5   library(tidyr)
 6   library(zoo)
 7
 8   gett <- read_csv("Gett_Trips_NYC_2016.csv") %>%
 9     mutate(
10       week_start = mdy(`Pickup Start Date`),
11       month = floor_date(week_start, "month")
12     )
13
14   gett_weekly <- gett %>%
15     group_by(
16       week_start
17     ) %>%
18     summarise(
19       gett = sum(`Total Dispatched Trips`)
20     )
21
22   gett_monthly <- gett %>%
23     group_by(
24       month
25     ) %>%
26     summarise(
27       gett = sum(`Total Dispatched Trips`)
28     )
29
30   lyft <- read_csv("Lyft_Trips_NYC_2016.csv") %>%
31     mutate(
32       week_start = mdy(`Pickup Start Date`),
33       month = floor_date(week_start, "month")
34     )
35
36   lyft_weekly <- lyft %>%
37     group_by(
38       week_start
39     ) %>%
40     summarise(
41       lyft = sum(`Total Dispatched Trips`)
42     )
43
44   lyft_monthly <- lyft %>%
45     group_by(
46       month
47     ) %>%
48     summarise(
49       lyft = sum(`Total Dispatched Trips`)
50     )
51
52   uber <- read_csv("Uber_Trips_NYC_2016.csv") %>%
53     mutate(
54       week_start = mdy(`Pickup Start Date`),
55       month = floor_date(week_start, "month")
56     )
```

```r
57
58   uber_weekly <- uber %>%
59     group_by(
60       week_start
61     ) %>%
62     summarise(
63       uber = sum(`Total Dispatched Trips`)
64     )
65
66   uber_monthly <- uber %>%
67     group_by(
68       month
69     ) %>%
70     summarise(
71       uber = sum(`Total Dispatched Trips`)
72     )
73
74   yellow_monthly <- read_csv("data_reports_monthly_indicators_yellow (3).csv") %>%
75     mutate(
76       month = ymd(paste0(`Month/Year`, "-01")),
77       yellow =`Trips Per Day` * days_in_month(month)
78     ) %>%
79     select(
80       month,
81       yellow
82     )
83
84   merged_weekly <- uber_weekly %>%
85     full_join(lyft_weekly, by = c("week_start" = "week_start")) %>%
86     full_join(gett_weekly, by = c("week_start" = "week_start")) %>%
87     arrange(week_start)
88
89   merged_monthly <- yellow_monthly %>%
90     full_join(uber_monthly, by = c("month" = "month")) %>%
91     full_join(lyft_monthly, by = c("month" = "month")) %>%
92     full_join(gett_monthly, by = c("month" = "month")) %>%
93     arrange(month)
94
95   merged_weekly %>%
96     filter(week_start >= ymd("2015-01-01")) %>%
97     mutate(
98       uber = uber / 1000000,
99       lyft = lyft / 1000000,
100      gett = gett / 1000000
101    ) %>%
102    write_csv('merged_weekly.csv', na = "null")
103
104  merged_monthly %>%
105    filter(month >= ymd("2013-01-01")) %>%
106    mutate(
107      yellow = yellow / 1000000,
108      uber = uber / 1000000,
109      lyft = lyft / 1000000,
110      gett = gett / 1000000
111    ) %>%
112    write_csv('merged_monthly.csv', na = "null")
113
```

```r
114  merged_weekly_flat <- merged_weekly %>%
115     gather(provider, total_trips, uber:gett)
116
117  merged_monthly_flat <- merged_monthly %>%
118     gather(provider, total_trips, yellow:gett)
119
120  ggplot(merged_weekly_flat) +
121     geom_line(aes(x = week_start, y = total_trips, color = provider)) +
122     scale_y_continuous(labels = scales::comma)
123
124  ggplot(merged_monthly_flat) +
125     geom_line(aes(x = month, y = total_trips, color = provider)) +
126     scale_y_continuous(labels = scales::comma)
127
```