

# Chapter 3 - Data Transformation with dplyr

Thalles Quinaglia Liduares

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Exercise 2

**2. Sort flights to find the most delayed flights. Find the flights that left earliest.**

```
library(dplyr)
library(nycflights13)
```

Upload database

```
data<-nycflights13::flights

View(data)
```

```
most_delayed<-data%>%
  arrange(desc(dep_delay))

most_delayed
```

```
## # A tibble: 336,776 x 19
##   year month   day dep_time sched_dep_time dep_delay arr_time sched_arr_time
##   <int> <int> <int>   <int>         <int>      <dbl>   <int>         <int>
## 1  2013     1     9     641           900      1301    1242           1530
## 2  2013     6    15    1432          1935      1137    1607           2120
## 3  2013     1    10    1121          1635      1126    1239           1810
## 4  2013     9    20    1139          1845      1014    1457           2210
## 5  2013     7    22     845          1600      1005    1044           1815
## 6  2013     4    10    1100          1900       960    1342           2211
## 7  2013     3    17    2321           810       911     135           1020
## 8  2013     6    27     959          1900       899    1236           2226
## 9  2013     7    22    2257           759       898     121           1026
## 10 2013    12     5     756          1700       896    1058           2020
## # ... with 336,766 more rows, and 11 more variables: arr_delay <dbl>,
## #   carrier <chr>, flight <int>, tailnum <chr>, origin <chr>, dest <chr>,
## #   air_time <dbl>, distance <dbl>, hour <dbl>, minute <dbl>, time_hour <dtm>
```

```
left_earliest<-data %>%
  arrange(dep_delay)

left_earliest
```

```
## # A tibble: 336,776 x 19
##   year month   day dep_time sched_dep_time dep_delay arr_time sched_arr_time
##   <int> <int> <int>   <int>         <int>       <dbl>   <int>         <int>
## 1  2013    12     7    2040           2123       -43     40           2352
## 2  2013     2     3    2022           2055      -33    2240           2338
## 3  2013    11    10    1408           1440      -32    1549           1559
## 4  2013     1    11    1900           1930      -30    2233           2243
## 5  2013     1    29    1703           1730      -27    1947           1957
## 6  2013     8     9     729           755       -26    1002           955
## 7  2013    10    23    1907           1932      -25    2143           2143
## 8  2013     3    30    2030           2055      -25    2213           2250
## 9  2013     3     2    1431           1455      -24    1601           1631
## 10 2013     5     5     934           958       -24    1225           1309
## # ... with 336,766 more rows, and 11 more variables: arr_delay <dbl>,
## #   carrier <chr>, flight <int>, tailnum <chr>, origin <chr>, dest <chr>,
## #   air_time <dbl>, distance <dbl>, hour <dbl>, minute <dbl>, time_hour <dtm>
```