# R Practice - dplyr and NYC Flights

See if you can answer a few more questions about the NYC flights data set
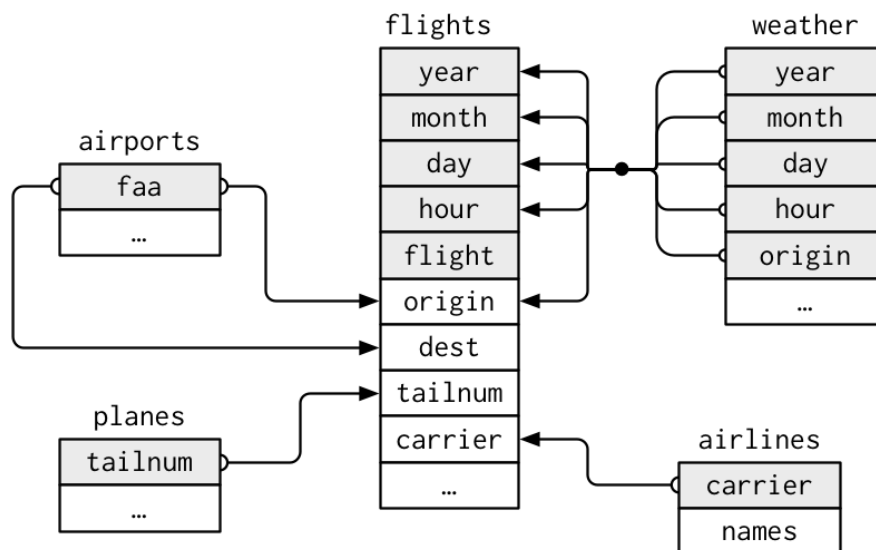
## Accessing the data

Make sure you load the data by loading the nycflights13 library

```
library(nycflights13)
```

And also besure to load tidyverse which includes dplyr

```
library(tidyverse)
```

Recall that the library include the following tables



## Use dplyr to answer these questions

Note that these can all be answered in one dplyr chain.

1) What destination received most flights in June?

2) What day of the week saw the most flights? (Hint, use the "time_hour" column which is a date/time column and use google to find a function to give you the weekday for a date).

3) How many airlines do not have the word "air" somewhere in their name? (Hint, try gooling for a function that can do string matching in R)

4) Which scheduled departure hour (use the "hour" column) had the largest proportion of flights delayed (dep_delay) longer than 5 min?

5) What the name of the airline that had the most flights in the table?

6) What was the average number of seats and engines on the plains that left from NYC on July 4? (Warning: Be careful with your joins!)

7) What was the most common plane model to fly out of NYC in October?

8) What was the total distance for all flights in January? What was the average distance per flight?

9) Which carrier had the greatest average distance per flight?

10) Which flight(s) had the greatest scheduled length (time between scheduled departure and arrival)? (Warning: Take notice how the values of `sched_arr_time and sched_dep_time` are formatted in the table).

11) Which flight traveled the fastest?

## Expected Values

1) Chicago O'Hare (ORD) with 1574
2) Monday with 50690
3) Only Virgin America
4) 9PM with 44.6%
5) United Airlines with 58665
6) Seats: 140.6581 Engines: 1.991974
7) The A320-232  with 3717 flights
8) 27,188,805 total miles with an average of 1006.844 miles per flight
9) Hawaiian Airlines Inc. with an average of 4983 miles per flight
10) Flight 51 with 6 hours 40 minutes
11) Flight 1499 to ATL flew 762 miles with average speed of  703.3846