## Specifying keys for the match

```
flights2 %>%
  left_join(weather)
#> Joining, by = c("year", "month", "day", "hour", "origin")
#> # A tibble: 336,776 x 18
     year month day hour origin dest tailnum carrier temp dewp humid
#>
    <int> <int> <int> <dbl> <chr> <chr>
                                                      <dbl> <dbl> <dbl>
                                              <chr>
                                                       39.0 28.0 64.4
     2013
                                       N14228 UA
                         5 EWR
#> 1
                                 IAH
                                       N24211 UA
                                                       39.9 25.0 54.8
#> 2
     2013
                         5 LGA
                                 IAH
#> 3
     2013
                                       N619AA AA
                         5 JFK
                                                       39.0 27.0 61.6
                                 MIA
     2013 1
#> 4
                         5 JFK
                                 BQN
                                       N804JB B6
                                                       39.0 27.0 61.6
     2013
                                       N668DN DL
#> 5
                         6 LGA
                                                       39.9 25.0 54.8
                                 ATL
#> 6
     2013
                         5 EWR
                                 ORD
                                       N39463 UA
                                                       39.0 28.0 64.4
#> # ... with 3.368e+05 more rows, and 7 more variables: wind_dir <dbl>,
      wind_speed <dbl>, wind_gust <dbl>, precip <dbl>, pressure <dbl>,
      visib <dbl>, time_hour <dttm>
#> #
```

By default, dplyr functions perform a "**natural join**", which matches observations using all variables that exist in **both** tables.

## Specifying keys for the match

```
flights2 %>%
  left_join(planes, by = "tailnum")
#> # A tibble: 336,776 x 16
     year x month day hour origin dest tailnum carrier year y type
      <int> <int> <dbl> <chr>
                                    <chr> <chr>
                                                   <chr>
                                                             <int> <chr>
#>
       2013
                            5 EWR
                                                              1999 Fixe...
                                     IAH
                                           N14228
                                                   UA
#> 1
                                           N24211
      2013
                                                              1998 Fixe...
#> 2
                            5 LGA
                                     IAH
#> 3
       2013
                            5 JFK
                                           N619AA
                                                              1990 Fixe...
                                     MIA
                                                              2012 Fixe...
#> 4
       2013
                            5 JFK
                                           N804JB
                                     BQN
#> 5
       2013
                            6 LGA
                                     ATL
                                           N668DN
                                                              1991 Fixe...
                                                   DL
                            5 EWR
#> 6
       2013
                                     ORD
                                           N39463
                                                              2012 Fixe...
#> # ... with 3.368e+05 more rows, and 6 more variables: manufacturer <chr>,
#> #
       model <chr>, engines <int>, seats <int>, speed <int>, engine <chr>
```

You can choose the variables that are used with the by argument