

Code Sleuth

Creating dates and times

Inference

Code example	Output
<pre>ymd("2017-01-31") mdy("January 31st, 2017") dmy("31-Jan-2017")</pre>	<pre>[1] "2017-01-31" [1] "2017-01-31" [1] "2017-01-31"</pre>
<pre>ymd_hms("2017-01-31 20:11:59") mdy_hm("01/31/2017 08:01")</pre>	<pre>[1] "2017-01-31 20:11:59 UTC" [1] "2017-01-31 08:01:00 UTC"</pre>

What do the orders of the letters in the function names mean?

Which functions produce *dates* and which produce *datetimes*?

Prediction

Which functions would you use to convert the following text to dates/datetimes?

"2000-02-29 14:55:02"

"August 19, 1975"

"04/07/1776 09:30"

Getting components

Inference

```
datetime <- ymd_hms("2017-01-31 20:11:59")
```

Code example	Output
<pre>year(datetime) month(datetime) mday(datetime) yday(datetime) wday(datetime)</pre>	<pre>[1] 2017 [1] 1 [1] 31 [1] 31 [1] 3</pre>
<pre>month(datetime, label = TRUE) wday(datetime, label = TRUE)</pre>	<pre>[1] Jan Levels: Jan < Feb < Mar < Apr < May < Jun < Jul < Aug < Sep < Oct < Nov < Dec [1] Tue Levels: Sun < Mon < Tue < Wed < Thu < Fri < Sat</pre>
<pre>hour(datetime) minute(datetime) second(datetime)</pre>	<pre>[1] 20 [1] 11 [1] 59</pre>

What do the date/datetime component functions do?

What does the *label* parameter do?

Prediction

What will be the values in the column "dep_wday"?

```
flights |>
  mutate(
    departure = make_datetime(year, month, day, hour, minute),
    dep_wday = wday(departure, label = TRUE)
  ) |>
  summarize(
    mean_delay = mean(dep_delay, na.rm = TRUE),
    .by = dep_wday
  )
```