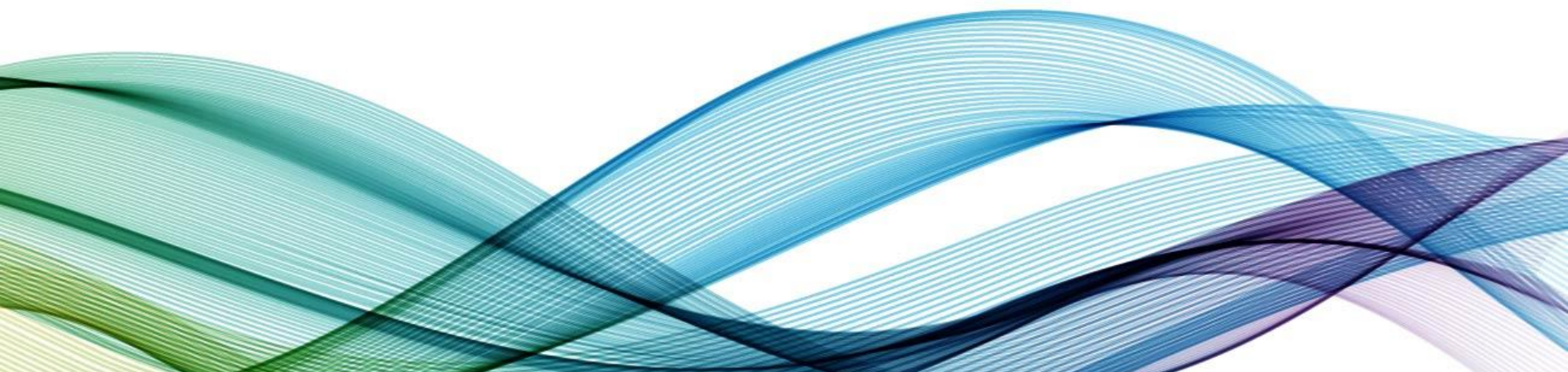




QuintilesIMS™

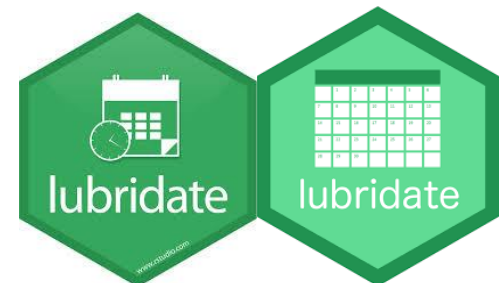
An Introduction to lubridate() package in R

Day 3



Agenda – Day 3

- Why character to date conversion is required in R?
- Different date formats available in lubridate() package
- Illustration



Why character to date conversion is required in R?

- By default R treats date variable as character variable, we have to streamline the date handling process by using the package `lubridate()`
- Doing so, one can easily do mathematical and statistical calculations using date variables
- Usually date operations include:
 1. Finding the time interval between two date variables (i.e. time differences)
 2. Extracting months and weekdays

Different date formats available in lubridate() package

- Lubridate contains many useful functions. We'll only be covering the basics here
- Type `help(package = lubridate)` to bring up an overview of the package, including the package description, a list of available functions

Functions*	Date
<code>dmy()</code>	26/11/2008
<code>ymd()</code>	2008/11/26
<code>mdy()</code>	11/26/2008
<code>dmy_hm</code>	26/11/2008 20:15
<code>dmy_hms</code>	26/11/2008 20:15:12

* **dmy** = day / month / year ; **hms** = hours / minutes / seconds

Illustration

- Set of date values >> lubridate functions used to stream line the date >> final R output

Date	Functions Used*	R output
26/11/2008	dmy()	2008-11-26
2008/11/26	ymd()	2008-11-26
11/26/2008	mdy()	2008-11-26
26/11/2008 20:15	dmy_hm	2008-11-26 20:15:00 UTC
26/11/2008 20:15:12	dmy_hms	2008-11-26 20:15:12 UTC

Note : R saves all the date value in YYYY/MM/YY (default date format), we can change the default date format by using format() function

* **dmy** = day / month / year ; **hms** = hours / minutes / seconds ; **UTC** = Coordinated Universal Time