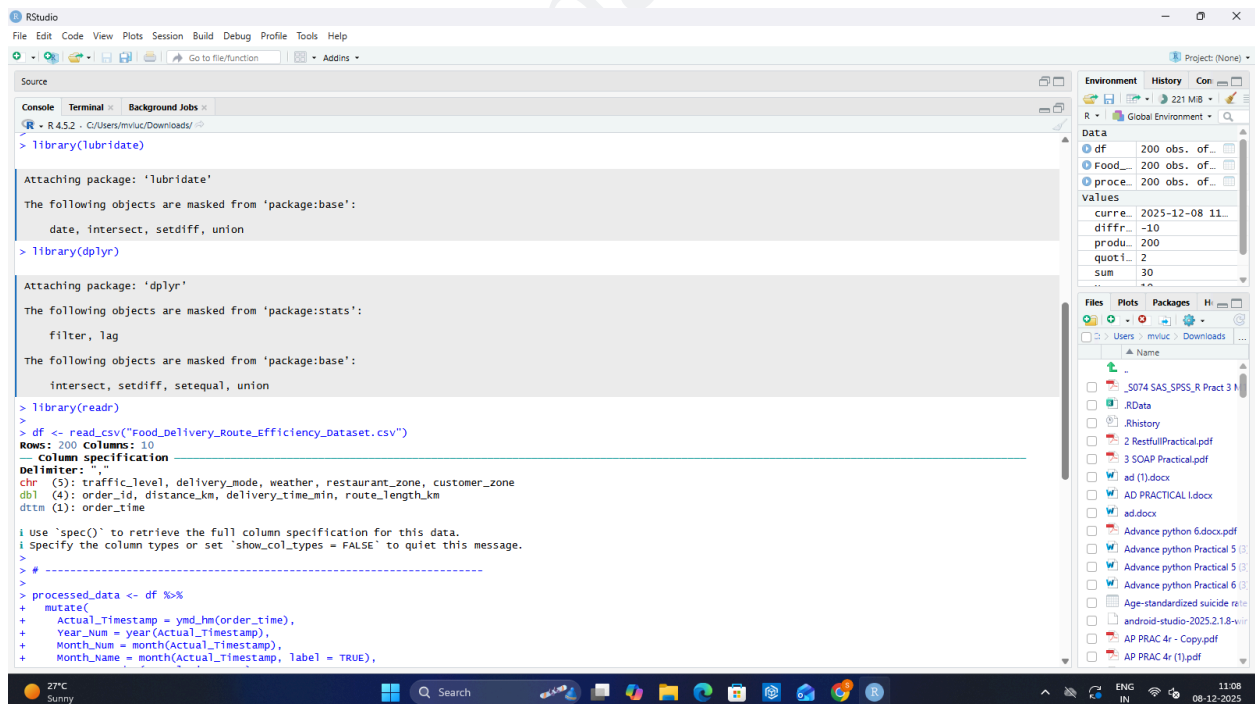


SHETH L.U.J AND SIR M.V. COLLEGE
SUBJECT NAME: DATA ANALYSIS WITH SAS/SPSS/R

Module 1 Practical 14

Aim: Extracting date components using lubridate:: functions (R).

OUTPUT:



```
> library(lubridate)

Attaching package: 'lubridate'

The following objects are masked from 'package:base':

    date, intersect, setdiff, union

> library(dplyr)

Attaching package: 'dplyr'

The following objects are masked from 'package:stats':

    filter, lag

The following objects are masked from 'package:base':

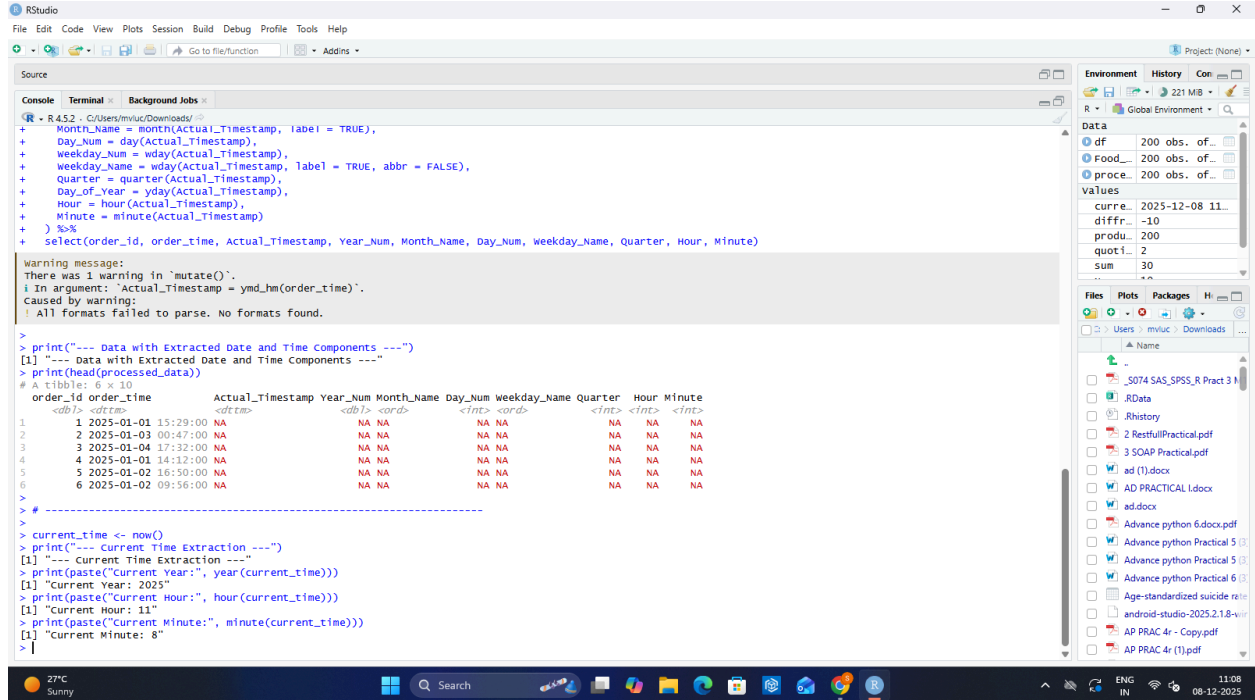
    intersect, setdiff, setequal, union

> library(readr)
> df <- read_csv("Food_Delivery_Route_Efficiency_Dataset.csv")
Rows: 200 Columns: 10
#> Column specification
#> _____
#> delimiter: ","
chr (3): traffic_level, delivery_mode, weather, restaurant_zone, customer_zone
dbl (4): order_id, distance_km, delivery_time_min, route_length_km
dtm (1): order_time

I use `spec()` to retrieve the full column specification for this data.
I specify the column types or set `show_col_types = FALSE` to quiet this message.
#> -----
> processed_data <- df %>%
+ mutate(
+   Actual_Timestamp = ymd_hm(order_time),
+   Year_Num = year(Actual_Timestamp),
+   Month_Num = month(Actual_Timestamp),
+   Month_Name = month(Actual_Timestamp, label = TRUE),
+ )
```

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The screenshot displays the RStudio environment with the following components:

- Source Editor:** Contains R code for data manipulation using `mutate()` and `select()` from the `dplyr` package. The code extracts date and time components from `Actual_Timestamp`.
- Console:** Shows the execution of the code, including a warning message about the `ymd_hm` function and the resulting data frame output.
- Environment:** Lists the objects in the global environment, including `df`, `Food`, `proc`, and `values`.
- Files:** Shows the file explorer with various documents and scripts.

```
R - R 4.5.2 - C:/Users/mvut/Downloads/
File Edit Code View Plots Session Build Debug Profile Tools Help
Go to file/function Addins

Source
Console Terminal Background Jobs
R - R 4.5.2 - C:/Users/mvut/Downloads/
+ Month_Name = month(Actual_Timestamp, label = TRUE),
+ Day_Num = day(Actual_Timestamp),
+ weekday_Name = wday(Actual_Timestamp),
+ weekday_Name = wday(Actual_Timestamp, label = TRUE, abbr = FALSE),
+ Quarter = quarter(Actual_Timestamp),
+ Day_of_Year = yday(Actual_Timestamp),
+ Hour = hour(Actual_Timestamp),
+ Minute = minute(Actual_Timestamp)
+ ) %>%
+ select(order_id, order_time, Actual_Timestamp, Year_Num, Month_Name, Day_Num, weekday_Name, Quarter, Hour, Minute)

Warning message:
There was 1 warning in `mutate()`.
! In argument: `Actual_Timestamp = ymd_hm(order_time)`.
! All formats failed to parse. No formats found.

>
> print("--- Data with Extracted Date and Time Components ---")
[1] "--- Data with Extracted Date and Time Components ---"
> print(head(processed_data))
# A tibble: 6 x 10
  order_id order_time Actual_Timestamp year_Num Month_Name Day_Num weekday_Name Quarter Hour Minute
  <dbl> <dtm> <dtm> <dbl> <ord> <int> <ord> <int> <int> <int>
1 1 2025-01-01 15:29:00 NA NA NA NA NA NA NA NA
2 2 2025-01-03 00:47:00 NA NA NA NA NA NA NA NA
3 3 2025-01-04 17:32:00 NA NA NA NA NA NA NA NA
4 4 2025-01-01 14:12:00 NA NA NA NA NA NA NA NA
5 5 2025-01-02 16:50:00 NA NA NA NA NA NA NA NA
6 6 2025-01-02 09:56:00 NA NA NA NA NA NA NA NA

> # -----
>
> current_time <- now()
> print("--- Current Time Extraction ---")
[1] "--- Current Time Extraction ---"
> print(paste("Current Year:", year(current_time)))
[1] "Current Year: 2025"
> print(paste("Current Hour:", hour(current_time)))
[1] "Current Hour: 11"
> print(paste("Current Minute:", minute(current_time)))
[1] "Current Minute: 8"
> |
```