

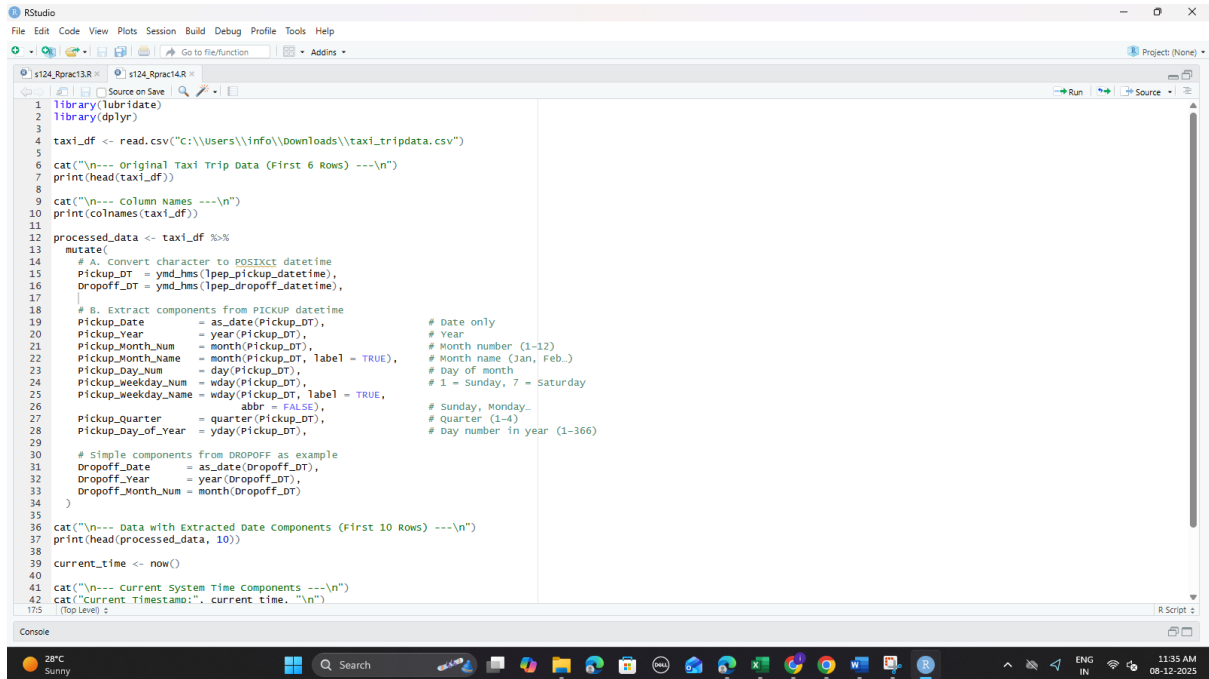
# SHETH L.U.J AND SIR M.V. COLLEGE

## SUBJECT :- DATA ANALYSIS WITH SAS/SPSS/R

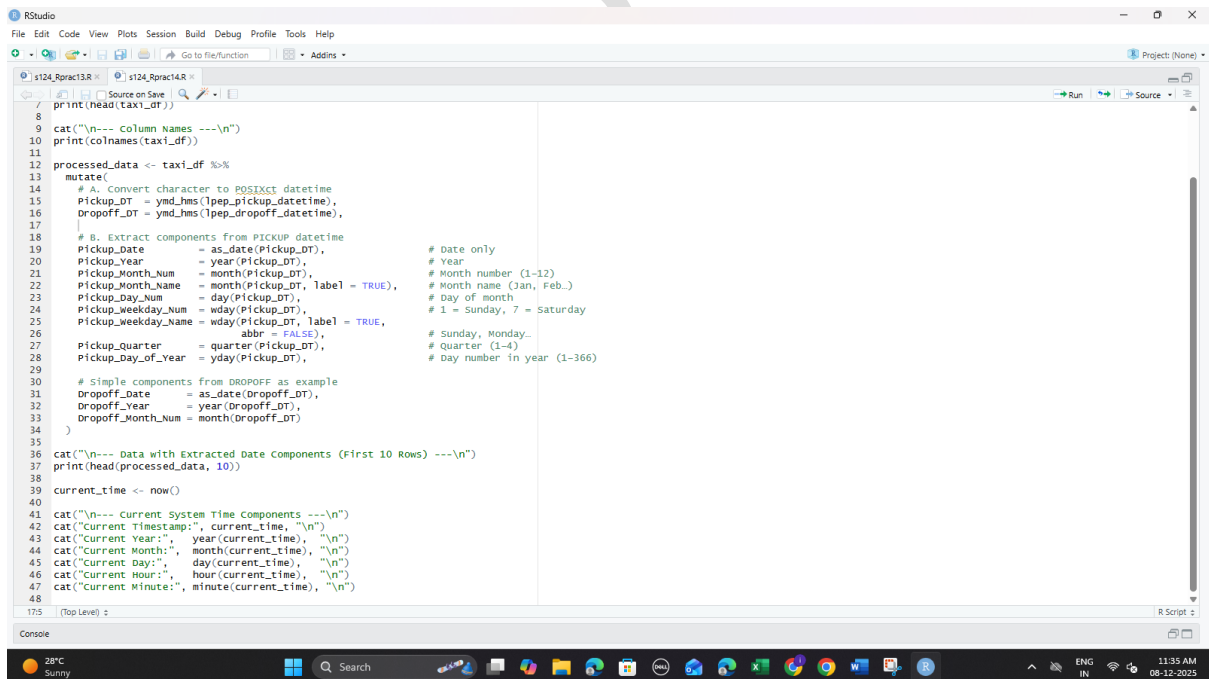
### PRACTICAL – 14

**AIM:-** Extracting date components using lubridate:: functions (R).

**OUTPUT:-**



```
1 library(lubridate)
2 library(dplyr)
3
4 taxi_df <- read.csv("C:\\Users\\info\\Downloads\\taxi_tripdata.csv")
5
6 cat("\n--- Original Taxi Trip Data (First 6 Rows) ---\n")
7 print(head(taxi_df))
8
9 cat("\n--- Column Names ---\n")
10 print(colnames(taxi_df))
11
12 processed_data <- taxi_df %>%
13   mutate(
14     # A. Convert character to POSIXct datetime
15     Pickup_DT = ymd_hms(lpep_pickup_datetime),
16     Dropoff_DT = ymd_hms(lpep_dropoff_datetime),
17     # B. Extract components from PICKUP datetime
18     Pickup_Date = as_date(Pickup_DT), # Date only
19     Pickup_Year = year(Pickup_DT), # Year
20     Pickup_Month_Num = month(Pickup_DT), # Month number (1-12)
21     Pickup_Month_Name = month(Pickup_DT, label = TRUE), # Month name (Jan, Feb..)
22     Pickup_Day_Num = day(Pickup_DT), # Day of month
23     Pickup_Weekday_Num = wday(Pickup_DT), # 1 = Sunday, 7 = Saturday
24     Pickup_Weekday_Name = wday(Pickup_DT, label = TRUE, abbr = FALSE), # Sunday, Monday..
25     Pickup_Quarter = quarter(Pickup_DT), # Quarter (1-4)
26     Pickup_Day_of_Year = yday(Pickup_DT), # Day number in year (1-366)
27     # Simple components from DROPOFF as example
28     Dropoff_Date = as_date(Dropoff_DT),
29     Dropoff_Year = year(Dropoff_DT),
30     Dropoff_Month_Num = month(Dropoff_DT)
31   )
32
33 cat("\n--- Data with Extracted Date Components (First 10 Rows) ---\n")
34 print(head(processed_data, 10))
35
36 current_time <- now()
37
38 cat("\n--- Current System Time Components ---\n")
39 cat("Current Timestamp:", current_time, "\n")
40
41 cat("Current Year:", year(current_time), "\n")
42 cat("Current Month:", month(current_time), "\n")
43 cat("Current Day:", day(current_time), "\n")
44 cat("Current Hour:", hour(current_time), "\n")
45 cat("Current Minute:", minute(current_time), "\n")
```



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```

**SUMEET JITENDRA YADAV**

**S124**