

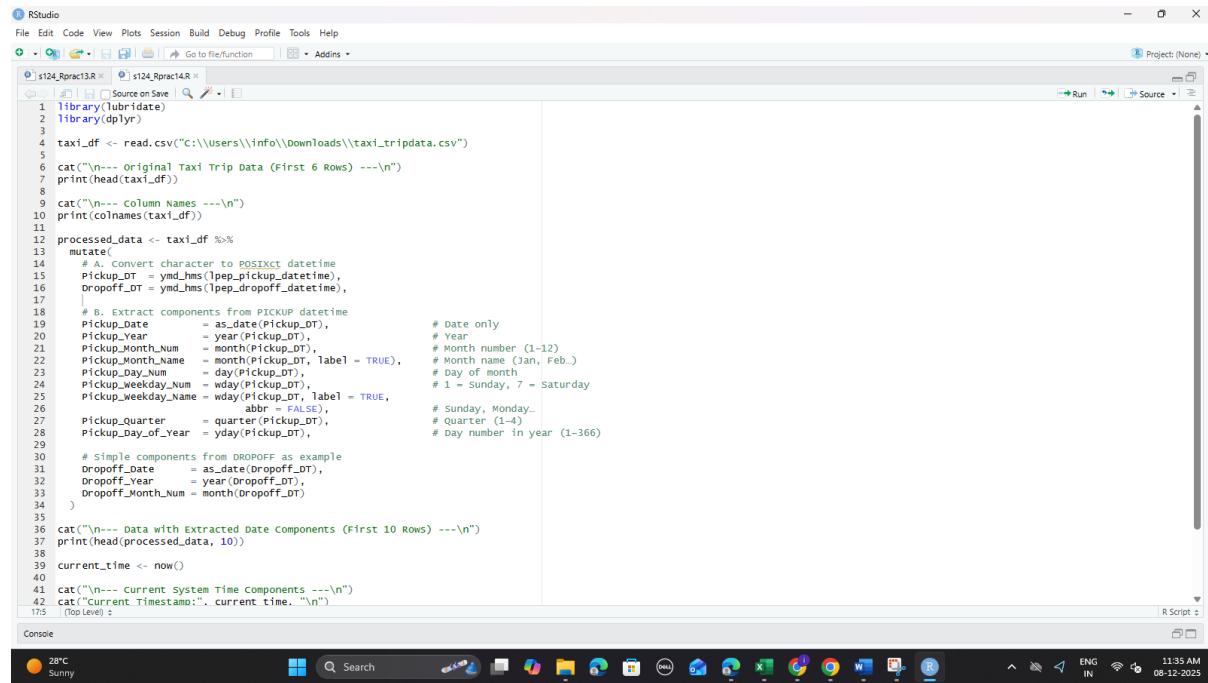
SHETH L.U.J AND SIR M.V. COLLEGE

SUBJECT :- DATA ANALYSIS WITH SAS/SPSS/R

PRACTICAL – 14

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

OUTPUT:-



```
library(lubridate)
library(dplyr)

taxi_df <- read.csv("C:\\\\users\\\\info\\\\Downloads\\\\taxi_tripdata.csv")
cat("\\n--- Original Taxi Trip Data (First 6 Rows) ---\\n")
print(head(taxi_df))

cat("\\n--- Column Names ---\\n")
print(colnames(taxi_df))

processed_data <- taxi_df %>
  mutate(
    # A. Convert character to POSIXct datetime
    Pickup_DT = ymd_hms(lpep_pickup_datetime),
    Dropoff_DT = ymd_hms(lpep_dropoff_datetime),
    )

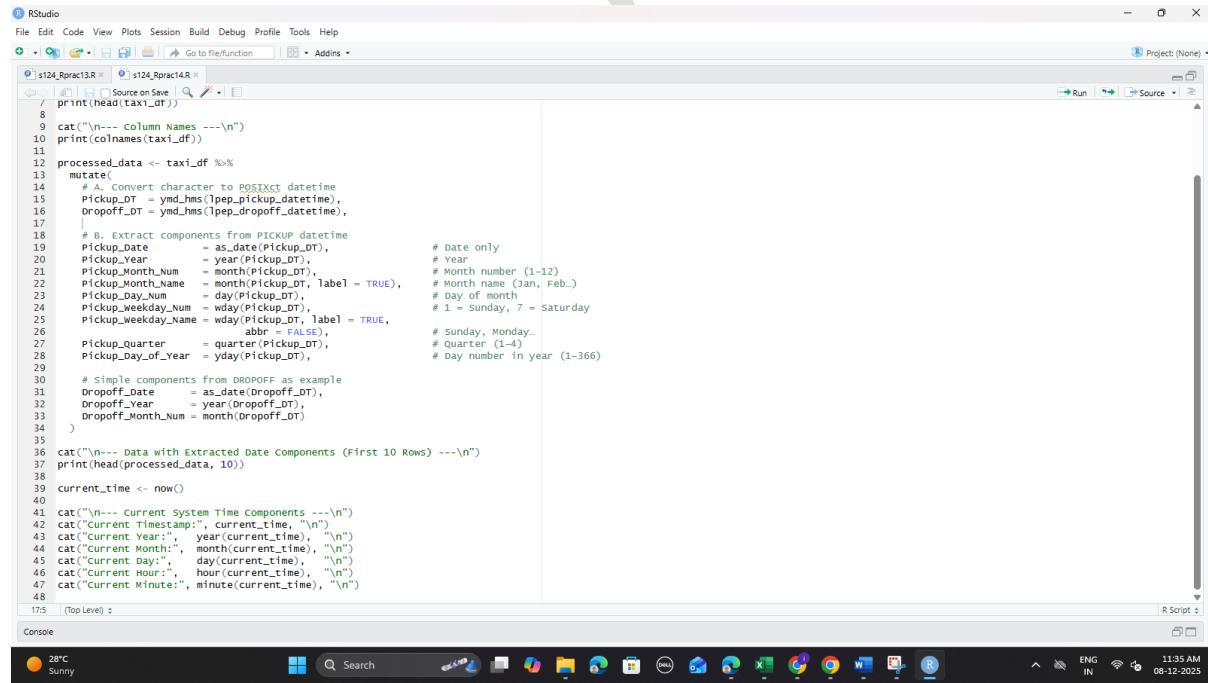
# B. Extract components from PICKUP datetime
Pickup_Date = as_date(Pickup_DT), # Date only
Pickup_Year = year(Pickup_DT), # Year
Pickup_Month_Num = month(Pickup_DT), # Month number (1-12)
Pickup_Month_Name = month(Pickup_DT, label = TRUE), # Month name (Jan, Feb...)
Pickup_Day_Num = day(Pickup_DT), # Day of month
Pickup_Weekday_Num = wday(Pickup_DT), # 1 = Sunday, 7 = Saturday
Pickup_Weekday_Name = wday(Pickup_DT, label = TRUE, abbr = FALSE), # Sunday, Monday...
Pickup_Quarter = quarter(Pickup_DT), # Quarter (1-4)
Pickup_Day_of_Year = yday(Pickup_DT), # Day number in year (1-366)

# simple components from dropoff as example
Dropoff_Date = as_date(Dropoff_DT),
Dropoff_Year = year(Dropoff_DT),
Dropoff_Month_Num = month(Dropoff_DT)

cat("\\n--- Data with Extracted Date Components (First 10 Rows) ---\\n")
print(head(processed_data, 10))

current_time <- now()

cat("\\n--- Current System Time Components ---\\n")
cat("Current Timestamp:", current_time, "\\n")
cat("Current Year:", year(current_time), "\\n")
cat("Current Month:", month(current_time), "\\n")
cat("Current Day:", day(current_time), "\\n")
cat("Current Hour:", hour(current_time), "\\n")
cat("Current Minute:", minute(current_time), "\\n")
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