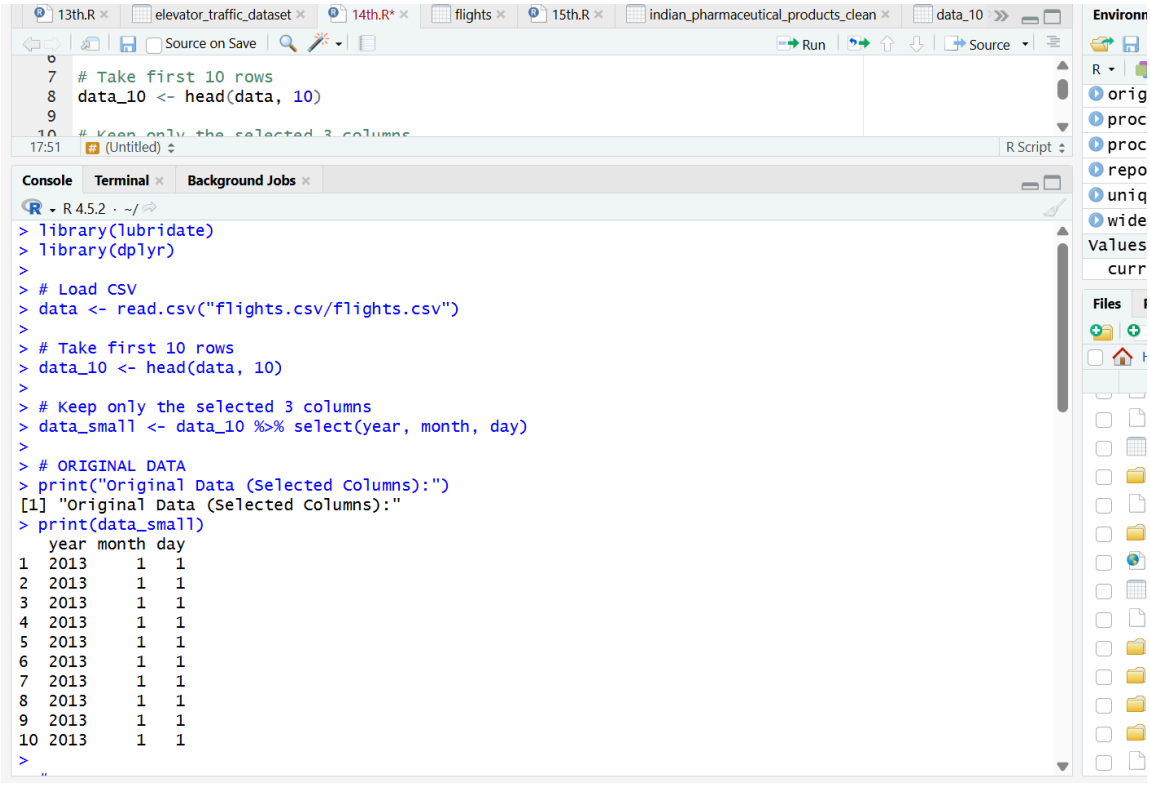
Sheth l.u.j. And sir m.v. college of arts science and commerce

Practical no.14th

Aim: Extracting date components using DATE functions (SAS), Date & Time Wizard (SPSS), and lubridate:: functions (R).



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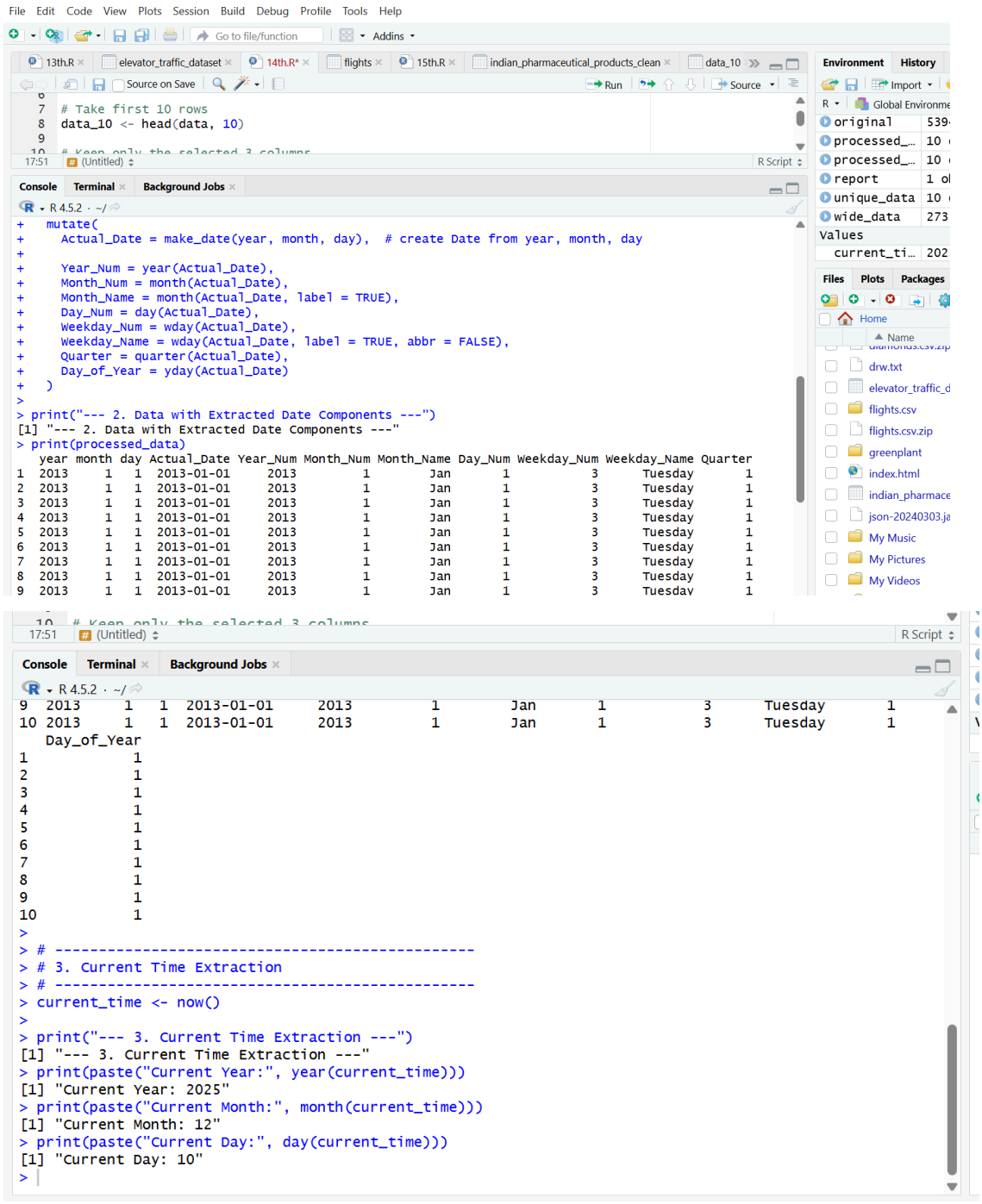

```
# Take first 10 rows
data_10 <- head(data, 10)

# Keep only the selected 3 columns
```

```
+   mutate(
+     Actual_Date = make_date(year, month, day),  # create Date from year, month, day
+
+     Year_Num = year(Actual_Date),
+     Month_Num = month(Actual_Date),
+     Month_Name = month(Actual_Date, label = TRUE),
+     Day_Num = day(Actual_Date),
+     Weekday_Num = wday(Actual_Date),
+     Weekday_Name = wday(Actual_Date, label = TRUE, abbr = FALSE),
+     Quarter = quarter(Actual_Date),
+     Day_of_Year = yday(Actual_Date)
+   )
>
> print("--- 2. Data with Extracted Date Components ---")
[1] "--- 2. Data with Extracted Date Components ---"
> print(processed_data)
   year month day Actual_Date Year_Num Month_Num Month_Name Day_Num Weekday_Num Weekday_Name Quarter
1  2013     1   1  2013-01-01     2013         1        Jan       1           3      Tuesday       1
2  2013     1   1  2013-01-01     2013         1        Jan       1           3      Tuesday       1
3  2013     1   1  2013-01-01     2013         1        Jan       1           3      Tuesday       1
4  2013     1   1  2013-01-01     2013         1        Jan       1           3      Tuesday       1
5  2013     1   1  2013-01-01     2013         1        Jan       1           3      Tuesday       1
6  2013     1   1  2013-01-01     2013         1        Jan       1           3      Tuesday       1
7  2013     1   1  2013-01-01     2013         1        Jan       1           3      Tuesday       1
8  2013     1   1  2013-01-01     2013         1        Jan       1           3      Tuesday       1
9  2013     1   1  2013-01-01     2013         1        Jan       1           3      Tuesday       1
10 2013     1   1  2013-01-01     2013         1        Jan       1           3      Tuesday       1
   Day_of_Year
1            1
2            1
3            1
4            1
5            1
6            1
7            1
8            1
9            1
10           1
>
> # ------------------------------------------------
> # 3. Current Time Extraction
> # ------------------------------------------------
> current_time <- now()
>
> print("--- 3. Current Time Extraction ---")
[1] "--- 3. Current Time Extraction ---"
> print(paste("Current Year:", year(current_time)))
[1] "Current Year: 2025"
> print(paste("Current Month:", month(current_time)))
[1] "Current Month: 12"
> print(paste("Current Day:", day(current_time)))
[1] "Current Day: 10"
>
```

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