

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

RStudio

File Edit Code View Plots Session Build Debug Profile Tools Help

Source

Console Background Jobs

R - R 4.5.2 - ~\

```
> install.packages("lubridate")
```

WARNING: Rtools is required to build R packages but is not currently installed. Please download and install the appropriate version of Rtools before proceeding:

https://cran.rstudio.com/bin/windows/Rtools/

Installing package into 'C:/Users/mvluc/AppData/Local/R/win-library/4.5'  
(as 'lib' is unspecified)

also installing the dependency 'timechange'

trying URL 'https://cran.rstudio.com/bin/windows/contrib/4.5/timechange\_0.3.0.zip'

trying URL 'https://cran.rstudio.com/bin/windows/contrib/4.5/lubridate\_1.9.4.zip'

package 'timechange' successfully unpacked and MD5 sums checked

package 'lubridate' successfully unpacked and MD5 sums checked

The downloaded binary packages are in  
  C:/Users/mvluc/AppData/Local/Temp/RtmpMH5kFJ/downloads\_packages

```
> library(lubridate)
```

Attaching package: 'lubridate'

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

  date, intersect, setdiff, union

```
> library(dplyr)
```

>

```
> >
```

> dates\_df <- data.frame(  
+   Event\_ID = 1:4,  
+   Date\_String = c("2023-01-15", "2023-10-31", "2024-02-29", "2024-12-25"))  
> >

```
> print("---- 1. Original Dataset ----")  
[1] "---- 1. Original Dataset ----"  
> print(dates_df)
```

Event_ID	Date_String
1	2023-01-15
2	2023-10-31
3	2024-02-29
4	2024-12-25

>

>

```
> processed_data <- dates_df %>%  
+   mutate(  
+     Actual_Date = ymd(Date_String),  
+     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)

Event_ID	Date_String	Actual_Date	Year_Num	Month_Num	Month_Name	Day_Num	weekday_num	weekday_name	Quarter	Day_of_Year
1	2023-01-15	2023-01-15	2023	1	Jan	15	1	Sunday	1	15
2	2023-10-31	2023-10-31	2023	10	Oct	31	7	Tuesday	4	304
3	2024-02-29	2024-02-29	2024	2	Feb	29	3	Wednesday	1	60
4	2024-12-25	2024-12-25	2024	12	Dec	25	5	Thursday	1	60

USD/INR  
+0.24%

Project: (None)

Environment History Connections Tutorial

Global Environment

dates\_df 4 obs. of 2 variables  
df 309 obs. of 16 variables  
df\_full 309 obs. of 16 variables  
df\_select\_ 308 obs. of 5 variables  
duplicate\_ 0 obs. of 4 variables  
long\_df 927 obs. of 4 variables  
lung\_clean 309 obs. of 3 variables  
lung\_df 309 obs. of 16 variables  
processed\_ 4 obs. of 11 variables  
report\_df 2 obs. of 5 variables  
student\_df 6 obs. of 3 variables  
survey\_lu\_ 309 obs. of 16 variables  
unique\_st\_ 6 obs. of 3 variables  
weight\_c1 10000 obs. of 3 variables

Files Plots Packages Help Viewer Presentations

C:\Users\mvluc\Downloads

Name Size

Sales Analysis Report.xlsx 708.2 KB  
survey lung cancer.csv 11 KB  
synthetic\_medical\_symptoms\_dataset 274.6 KB  
TY.B.Sc-IT-Sem-V-VI Revised 24-25.i 1.2 MB  
TY.B.Sc-IT-Sem-V-VI Revised 24-25.d 1.2 MB  
tips.csv 9.5 KB  
Top\_20\_Pakistani\_Universities.csv 3.2 KB  
yash.jpg 7.7 KB  
S120 Yukta Sonawane - 11.pdf 375.1 KB  
weight-height.csv 418.1 KB  
S120 Yukta Sonawane - 12.pdf 399.5 KB  
S120 Yukta Sonawane - 11,12,13,14,i 381.5 KB  
S120 Yukta Sonawane - 13.pdf 381.5 KB

BSE midcap -0.84% 11:50 ENG IN 08-12-2025

RStudio

File Edit Code View Plots Session Build Debug Profile Tools Help

Source

Console Background Jobs

R - R 4.5.2 - ~\

```
> >
```

> dates\_df <- data.frame(  
+   Event\_ID = 1:4,  
+   Date\_String = c("2023-01-15", "2023-10-31", "2024-02-29", "2024-12-25"))  
> >

> print("---- 1. Original Dataset ----")  
[1] "---- 1. Original Dataset ----"  
> print(dates\_df)

Event_ID	Date_String
1	2023-01-15
2	2023-10-31
3	2024-02-29
4	2024-12-25

>

>

```
> processed_data <- dates_df %>%  
+   mutate(  
+     Actual_Date = ymd(Date_String),  
+     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)

Event_ID	Date_String	Actual_Date	Year_Num	Month_Num	Month_Name	Day_Num	weekday_num	weekday_name	Quarter	Day_of_Year
1	2023-01-15	2023-01-15	2023	1	Jan	15	1	Sunday	1	15
2	2023-10-31	2023-10-31	2023	10	Oct	31	7	Tuesday	4	304
3	2024-02-29	2024-02-29	2024	2	Feb	29	3	Wednesday	1	60
4	2024-12-25	2024-12-25	2024	12	Dec	25	5	Thursday	1	60

Project: (None)

Environment History Connections Tutorial

Global Environment

dates\_df 4 obs. of 2 variables  
df 309 obs. of 16 variables  
df\_full 309 obs. of 16 variables  
df\_select\_ 308 obs. of 5 variables  
duplicate\_ 0 obs. of 4 variables  
long\_df 927 obs. of 4 variables  
lung\_clean 309 obs. of 3 variables  
lung\_df 309 obs. of 16 variables  
processed\_ 4 obs. of 11 variables  
report\_df 2 obs. of 5 variables  
student\_df 6 obs. of 3 variables  
survey\_lu\_ 309 obs. of 16 variables  
unique\_st\_ 6 obs. of 3 variables  
weight\_c1 10000 obs. of 3 variables

Files Plots Packages Help Viewer Presentations

C:\Users\mvluc\Downloads

Name Size

Sales Analysis Report.xlsx 708.2 KB  
survey lung cancer.csv 11 KB  
synthetic\_medical\_symptoms\_dataset 274.6 KB  
TY.B.Sc-IT-Sem-V-VI Revised 24-25.i 1.2 MB  
TY.B.Sc-IT-Sem-V-VI Revised 24-25.d 1.2 MB  
tips.csv 9.5 KB  
Top\_20\_Pakistani\_Universities.csv 3.2 KB  
yash.jpg 7.7 KB  
S120 Yukta Sonawane - 11.pdf 375.1 KB  
weight-height.csv 418.1 KB  
S120 Yukta Sonawane - 12.pdf 399.5 KB  
S120 Yukta Sonawane - 11,12,13,14,i 381.5 KB  
S120 Yukta Sonawane - 13.pdf 381.5 KB

BSE midcap -0.84% 11:50 ENG IN 08-12-2025

**YUKTA SONAWANE S120  
R PROGRAMMING  
PRACTICAL NO : 14**

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

RStudio  
File Edit Code View Plots Session Build Debug Profile Tools Help

Source

R - R.45.2 - ~

```
+ 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)
#> #> Event_ID Date_String Actual_date Year_Num Month_Num Month_Name Day_Num
#> 1 1 2023-01-15 2023-01-15 2023 1 Jan 15
#> 2 2 2023-10-31 2023-10-31 2023 10 Oct 31
#> 3 3 2024-02-29 2024-02-29 2024 2 Feb 29
#> 4 4 2024-12-25 2024-12-25 2024 12 Dec 25
#> #> Weekday_Num Weekday_Name Quarter Day_of_Year
#> 1 1 Sunday 1 15
#> 2 3 Tuesday 4 304
#> 3 5 Thursday 1 60
#> 4 4 Wednesday 4 360
#>
#>
#> 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: 8"
> print(paste("Current Hour:", hour(current_time)))
[1] "Current Hour: 11"
> print(paste("Current Minute:", minute(current_time)))
[1] "Current Minute: 50"
>
> print("Yukta Sonawane S120")
[1] "Yukta Sonawane S120"
|
```

Environment History Connections Tutorial  
Global Environment

Project: (None)

Source

Console Background Jobs

Files Plots Packages Help Viewer Presentation

Sales Analysis Report.xlsx survey lung cancer.csv synthetic\_medical\_symptoms\_dataset\_2746 KB T.Y.B.Sc-I.T-Sem-V-VI Revised 24-25 ( 1.2 MB T.Y.B.Sc-I.T-Sem-V-VI Revised 24-25.d 1.2 MB tips.csv Top\_10\_Pakistani\_Universities.csv yash.jpg S120 Yukta Sonawane -11.pdf 375.1 KB weight-height.csv S120 Yukta Sonawane -12.pdf 418.1 KB S120 Yukta Sonawane -11,12,13,14,1! 381.5 KB S120 Yukta Sonawane -13.pdf 381.5 KB

USD/INR +24%

Search

EN 11:51 08-12-2025

**YUKTA SONAWANE S120  
R PROGRAMMING  
PRACTICAL NO : 14**