

# SHETH L.U.J. AND SIR M.V. COLLEGE OF ARTS SCIENCE AND COMMERCE

SUBJECT : R Programming

## Practical No 14

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

### Output :

```
RStudio
File Edit Code View Plots Session Build Debug Profile Tools Help
Source
Console Terminal Background Jobs
R - R 4.5.1 - ~/R
> library(lubridate)
> library(dplyr)
> amazon_df <- read.csv("Amazon.csv")
>
> processed_data <- amazon_df %>%
+ mutate(
+   Actual_Date = ymd(OrderDate),
+   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(processed_data)
  orderID OrderDate CustomerID CustomerName ProductID ProductName Category Brand Quantity unitPrice Discount Tax ShippingCost TotalAmount PaymentMethod
1 ORD0000001 2023-01-31 CUST001504 vihaan sharma P00014 Drone Mini Books BrightLux 3 106.59 0.00 0.09 0.09 319.86 Debit Card
2 ORD0000002 2023-12-30 CUST000178 Pooja Kumar P00040 Microphone Home & Kitchen urbanstyle 1 251.37 0.05 19.10 1.74 259.64 Amazon Pay
3 ORD0000003 2023-05-10 CUST047516 Sneha Singh P00044 Power Bank 20000mah Clothing urbanstyle 3 35.03 0.10 7.57 5.91 108.06 Debit Card
4 ORD0000004 2023-07-18 CUST030059 vihaan Reddy P00041 Webcam Full HD Home & Kitchen Zenith 5 33.58 0.15 11.42 5.53 159.66 cash on Delivery
5 ORD0000005 2023-02-04 CUST048677 Aditya Kapoor P00029 T-shirt Clothing KiddoFun 2 515.64 0.25 38.67 9.23 821.36 Credit Card
6 ORD0000006 2022-12-31 CUST042705 Karan Sharma P00023 Cookware Set Books ReadMore 4 449.73 0.00 215.87 2.74 2017.53 UPI
7 ORD0000007 2024-09-20 CUST037667 Aarav Verma P00030 Dress Shirt Clothing urbanstyle 2 219.81 0.20 28.14 14.97 394.81 UPI
8 ORD0000008 2022-11-10 CUST031165 Rohit Kumar P00028 Jeans Toys & Games KiddoFun 2 306.51 0.05 29.12 6.24 617.73 Debit Card
9 ORD0000009 2024-06-26 CUST026965 Aman Kapoor P00031 Kids Toy Car Sports & Outdoors Apex 4 146.09 0.00 46.75 7.03 638.14 Debit Card
10 ORD0000010 2020-05-01 CUST029472 Aarav Reddy P00001 Wireless Earbuds Clothing Apex 2 278.21 0.10 60.09 4.88 365.73 Credit Card
11 ORD0000011 2021-04-11 CUST005346 Rohit Reddy P00046 Car Charger Books HomeEase 1 141.42 0.05 6.72 9.70 150.77 Amazon Pay
12 ORD0000012 2023-05-23 CUST046088 Karan Kumar P00042 Projector Mini Home & Kitchen KiddoFun 5 346.56 0.05 131.69 13.38 1791.23 Credit Card
13 ORD0000013 2020-11-26 CUST026576 Simran Kapoor P00018 Vacuum Cleaner Home & Kitchen Zenith 4 496.76 0.05 94.38 4.43 1986.50 UPI
14 ORD0000014 2024-01-22 CUST006051 Pooja Sharma P00040 Microphone Home & Kitchen Apex 3 523.27 0.00 188.38 8.04 1766.23 Debit Card
15 ORD0000015 2020-03-28 CUST025111 Rohit Mehta P00035 Desk Plant Books HomeEase 4 291.37 0.10 52.45 1.76 1103.14 Net Banking
16 ORD0000016 2023-10-28 CUST040957 Anjali Gupta P00028 Jeans Sports & Outdoors HomeEase 4 533.12 0.25 79.97 2.58 1661.91 Amazon Pay
17 ORD0000017 2023-01-28 CUST000735 Arjun Kumar P00025 Running Shoes Home & Kitchen Zenith 4 453.47 0.10 0.00 4.39 1636.88 Amazon Pay
18 ORD0000018 2022-05-21 CUST038237 Anjali Verma P00039 Graphic Tablet Toys & Games KiddoFun 5 547.58 0.00 0.00 10.06 2747.96 Amazon Pay
19 ORD0000019 2024-08-14 CUST040211 Aditya Mehta P00033 Puzzle 1000pc Electronics ReadMore 5 529.19 0.00 317.51 4.57 2968.03 Amazon Pay
20 ORD0000020 2020-05-10 CUST046893 Vihaan Patel P00040 Microphone Sports & Outdoors HomeEase 3 303.53 0.00 72.85 4.18 987.62 UPI
21 ORD0000021 2024-08-12 CUST041508 Vikas Kapoor P00028 Jeans Toys & Games Apex 1 226.26 0.00 11.31 9.55 247.12 Credit Card
22 ORD0000022 2023-08-25 CUST048817 Pooja Sharma P00010 Smartwatch Books ReadMore 4 493.47 0.00 98.69 11.80 2084.37 Credit Card
23 ORD0000023 2022-02-08 CUST048828 Simran Reddy P00003 Smartphone Case Toys & Games Apex 5 452.12 0.00 113.03 9.62 2383.25 Debit Card
```

NAME : SHUBHAM SANJAY KARAPE

ROLL NO : S085

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```
RStudio
File Edit Code View Plots Session Build Debug Profile Tools Help
Go to file/function Addins Project: (None)

Source
Console Terminal Background Jobs
R - R 4.5.1 - ~/
31 ORDD000031 2020-10-03 CUST018693 Sneha Verma P00046 Car Charger Books Apex 2 269.80 0.00 97.13 1.49 638.22 Debit Card
32 ORDD000032 2023-03-30 CUST044089 Sunita Gupta P00006 Gaming Mouse Sports & Outdoors FitLife 4 126.50 0.10 22.77 7.01 485.18 Credit Card
33 ORDD000033 2021-04-04 CUST011946 Simran Patel P00047 Memory Card 128GB Electronics CoreTech 2 151.95 0.05 14.44 3.50 306.64 Credit Card
34 ORDD000034 2023-08-30 CUST049225 Mohit Patel P00046 Car Charger Clothing HomeEase 1 218.74 0.00 10.94 12.22 241.90 Credit Card

orderstatus City state Country SellerID Actual_date Year_Num Month_Num Month_Name Day_Num weekday_Num weekday_Name quarter Day_of_Year
1 delivered Washington DC India SELL01967 2023-01-31 2023 1 Jan 31 3 Tuesday 1 31
2 delivered Fort Worth TX United States SELL01298 2023-12-30 2023 12 Dec 31 7 Saturday 4 364
3 delivered Austin TX United States SELL00908 2022-05-10 2022 5 May 10 3 Tuesday 2 130
4 delivered Charlotte NC India SELL01164 2023-07-18 2023 7 Jul 18 3 Tuesday 3 199
5 cancelled San Antonio TX Canada SELL01411 2023-02-04 2023 2 Feb 4 7 Saturday 1 35
6 delivered Los Angeles CA United States SELL01494 2022-12-31 2022 12 Dec 31 7 Saturday 4 365
7 delivered Chicago IL Australia SELL01676 2024-09-20 2024 9 Sep 20 6 Friday 3 264
8 pending Denver CO India SELL00510 2022-11-10 2022 11 Nov 10 5 Thursday 4 314
9 delivered Washington DC United States SELL01895 2024-06-26 2024 6 Jun 26 4 Wednesday 2 178
10 delivered Houston TX United States SELL01584 2020-05-01 2020 5 May 1 6 Friday 2 122
11 delivered Jacksonville FL Australia SELL01217 2021-04-11 2021 4 Apr 11 1 Sunday 2 101
12 shipped Charlotte NC Australia SELL01160 2023-05-23 2023 5 May 23 3 Tuesday 2 143
13 delivered New York NY United States SELL00719 2020-11-26 2020 11 Nov 26 5 Thursday 4 331
14 shipped Seattle WA United States SELL00672 2024-01-22 2024 1 Jan 22 2 Monday 1 22
15 delivered Indianapolis IN United States SELL01541 2020-03-28 2020 3 Mar 28 7 Saturday 1 88
16 delivered Jacksonville FL United States SELL00437 2023-10-28 2023 10 Oct 28 7 Saturday 4 301
17 delivered Philadelphia PA United States SELL01971 2023-01-28 2023 1 Jan 28 7 Saturday 1 28
18 delivered Seattle WA United States SELL00132 2022-05-21 2022 5 May 21 7 Saturday 2 141
19 returned Phoenix AZ United States SELL01907 2024-08-14 2024 8 Aug 14 4 Wednesday 3 227
20 delivered San Diego CA United States SELL00881 2020-05-10 2020 5 May 10 1 Sunday 2 131
21 delivered Fort Worth TX United States SELL01947 2024-08-12 2024 8 Aug 12 3 Monday 3 225
22 delivered Chicago IL Australia SELL01672 2023-08-25 2023 8 Aug 25 6 Friday 3 237
23 delivered Phoenix AZ Canada SELL01102 2022-02-08 2022 2 Feb 8 3 Tuesday 1 39
24 delivered Dallas TX United States SELL01507 2020-12-09 2020 12 Dec 9 4 Wednesday 4 344
25 delivered Jacksonville FL United States SELL01553 2024-02-24 2024 2 Feb 24 7 Saturday 1 55
26 pending Columbus OH Canada SELL00342 2023-12-08 2023 12 Dec 8 6 Friday 4 342
27 delivered San Francisco CA United States SELL01129 2022-03-16 2022 3 Mar 16 4 Wednesday 1 75
28 delivered San Antonio TX United Kingdom SELL01796 2021-01-20 2021 1 Jan 20 4 Wednesday 1 20
29 delivered Denver CO United States SELL01715 2023-04-30 2023 4 Apr 30 1 Sunday 2 120
30 delivered Phoenix AZ United States SELL00874 2022-08-13 2022 8 Aug 13 7 Saturday 3 225
31 delivered Charlotte NC United Kingdom SELL01318 2020-10-03 2020 10 Oct 3 7 Saturday 4 277
32 shipped Houston TX India SELL00384 2023-03-30 2023 3 Mar 30 5 Thursday 1 89
33 delivered Washington DC United States SELL01798 2021-04-04 2021 4 Apr 4 1 Sunday 2 94
34 delivered Austin TX United States SELL00219 2023-08-30 2023 8 Aug 30 4 Wednesday 3 242

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>
> current_time <- now()
> print(paste("Current Year:", year(current_time)))
[1] "Current Year: 2025"
> print(paste("Current Hour:", hour(current_time)))
[1] "Current Hour: 12"
> print(paste("Current Minute:", minute(current_time)))
[1] "Current Minute: 45"
>
```

```
RStudio
File Edit Code View Plots Session Build Debug Profile Tools Help
Go to file/function Addins Project: (None)

Source
Console Terminal Background Jobs
R - R 4.5.1 - ~/
3 delivered Austin TX United States SELL00908 2022-05-10 2022 5 May 10 3 Tuesday 2 130
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24 delivered Dallas TX United States SELL01507 2020-12-09 2020 12 Dec 9 4 Wednesday 4 344
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26 pending Columbus OH Canada SELL00342 2023-12-08 2023 12 Dec 8 6 Friday 4 342
27 delivered San Francisco CA United States SELL01129 2022-03-16 2022 3 Mar 16 4 Wednesday 1 75
28 delivered San Antonio TX United Kingdom SELL01796 2021-01-20 2021 1 Jan 20 4 Wednesday 1 20
29 delivered Denver CO United States SELL01715 2023-04-30 2023 4 Apr 30 1 Sunday 2 120
30 delivered Phoenix AZ United States SELL00874 2022-08-13 2022 8 Aug 13 7 Saturday 3 225
31 delivered Charlotte NC United Kingdom SELL01318 2020-10-03 2020 10 Oct 3 7 Saturday 4 277
32 shipped Houston TX India SELL00384 2023-03-30 2023 3 Mar 30 5 Thursday 1 89
33 delivered Washington DC United States SELL01798 2021-04-04 2021 4 Apr 4 1 Sunday 2 94
34 delivered Austin TX United States SELL00219 2023-08-30 2023 8 Aug 30 4 Wednesday 3 242

[ reached 'max' / getoption("max.print") -- omitted 99966 rows ]

>
> current_time <- now()
> print(paste("Current Year:", year(current_time)))
[1] "Current Year: 2025"
> print(paste("Current Hour:", hour(current_time)))
[1] "Current Hour: 12"
> print(paste("Current Minute:", minute(current_time)))
[1] "Current Minute: 45"
>
```

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