

How can I extract the month from a date in R? Can you provide some examples?

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In order to extract the month from a given date in R, one can use the "month" function which is part of the "lubridate" package. This function allows for easy extraction of the month component from a date object, and it can be used with various date formats. For example, if the date is in the format of "YYYY-MM-DD", the month function will return the numerical representation of the month (e.g. "01" for January). Similarly, if the date is in the format of "DD/MM/YYYY", the month function will return the numerical representation of the month (e.g. "12" for December). Additional examples and instructions on how to use the "month" function can be found in the documentation of the "lubridate" package.

Extract Month from Date in R (With Examples)

There are two ways to quickly extract the month from a date in R:

Method 1: Use format()

```
df$month <- format(as.Date(df$date),  
format="%d/%m/%Y"), "%m")
```

Method 2: Use the lubridate package

```
library(lubridate)
```

```
df$month <- month(mdy(df$date))
```

This tutorial shows an example of how to use each of these methods in practice.

Method 1: Extract Month from Date Using format()

The following code shows how to extract the month from a date using the format() function combined with the "%m" argument:

```
#create data frame
```

```
df <- data.frame(date=c("01/01/2021", "01/04/2021" ,  
"01/09/2021"),  
sales=c(34, 36, 44))
```

```
#view data frame
```

```
df
```

```
date sales
```

```
1 01/01/2021 34
```

```
2 01/04/2021 36
```

```
3 01/09/2021 44
```

```
#create new variable that contains month
```

```
df$month <- format(as.Date(df$date,  
format="%d/%m/%Y"), "%m")
```

```
#view updated data frame
```

```
df
```

```
date sales month
1 01/01/2021 34 01
2 01/04/2021 36 04
3 01/09/2021 44 09
```

Note that this `format()` function works with a variety of date formats. You simply must specify the format:

```
#create data frame
df <- data.frame(date=c("2021-01-01", "2021-01-04" ,
"2021-01-09"),
sales=c(34, 36, 44))
```

```
#view data frame
df
```

```
date sales
1 2021-01-01 34
2 2021-01-04 36
3 2021-01-09 44
```

```
#create new variable that contains month
df$month<- format(as.Date(df$date, format="%Y-%m-
%d"), "%m")
```

```
#view updated data frame  
df
```

```
date sales month  
1 2021-01-01 34 01  
2 2021-01-04 36 01  
3 2021-01-09 44 01
```

Note: You can also use %B to extract the month as a string name (January) instead of a numeric value (01).

Method 2: Extract Month from Date Using Lubridate

We can also use functions from the lubridate package to quickly extract the month from a date:

```
library(lubridate)  
  
#create data frame  
df <- data.frame(date=c("01/01/2021", "01/04/2021" ,  
"01/09/2021"),  
sales=c(34, 36, 44))
```

```
#view data frame  
df
```

```
date sales
```

```
1 01/01/2021 34
```

```
2 01/04/2021 36
```

```
3 01/09/2021 44
```

```
#create new variable that contains month
```

```
df$month<- month(mdy(df$date))
```

```
#view updated data frame
```

```
df
```

```
date sales month
```

```
1 01/01/2021 34 1
```

```
2 01/04/2021 36 1
```

```
3 01/09/2021 44 1
```

Lubridate also works with a variety of date formats. You simply must specify the format:

```
#create data frame
```

```
df <- data.frame(date=c("2021-01-01", "2021-01-04" ,  
"2021-01-09"),
```

```
sales=c(34, 36, 44))
```

```
#view data frame
```

df

date sales

1 2021-01-01 34

2 2021-01-04 36

3 2021-01-09 44

#create new variable that contains month

df\$month <- month(ymd(df\$date))

#view updated data frame

df

date sales month

1 2021-01-01 34 1

2 2021-01-04 36 1

3 2021-01-09 44 1

Additional Resources