How do I convert a date to its corresponding quarter and year?

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To convert a given date to its corresponding quarter and year, follow these steps:

1. Identify the date in question.
2. Determine the quarter by dividing the month of the date by 3. For example, if the month is January, the quarter would be 1, if the month is April, the quarter would be 2, and so on.
3. Determine the year by using the full year of the date.
4. Combine the quarter and year to get the desired result. For instance, if the date is June 15, 2021, the corresponding quarter and year would be Q2 2021.

This process can be useful for organizing and analyzing data that is categorized by quarters and years. It can also be used in financial and business settings for reporting and forecasting purposes. By converting a date to its corresponding quarter and year, one can easily track and compare data over a specific period of time.

R: Convert Date to Quarter and Year

You can use one of the following two methods to quickly convert a date to a quarter and year format in R:

Method 1: Use zoo Package

library(zoo)

#convert date to year/quarter format
#df$date <- as.yearqtr(df$date, format = '%Y-%m-%d')

Method 2: Use lubridate Package

library(lubridate)
library(dplyr)

df %>% mutate(date = quarter(date, with_year = TRUE))

The following examples show how to use each method with the following data frame:

```
#create data frame
df <- data.frame(date=c('2022-01-03', '2022-02-15',
'2022-05-09',
'2022-08-10', '2022-10-14', '2022-12-30'),
sales=c(130, 98, 120, 88, 94, 100))

#view data frame
df
```

```
        date sales
1 2022-01-03   130
2 2022-02-15    98
3 2022-05-09   120
4 2022-08-10    88
5 2022-10-14    94
6 2022-12-30   100
```

Example 1: Use zoo Package

The following code shows how to use the as.yearqtr()

function from the zoo package to format dates in a year/quarter format:

```
library(zoo)

#convert date to year/quarter format
df$date <- as.yearqtr(df$date, format = '%Y-%m-%d')

#view updated data frame
df

date sales
1 2022 Q1 130
2 2022 Q1 98
3 2022 Q2 120
4 2022 Q3 88
5 2022 Q4 94
6 2022 Q4 100
```

Each date has been converted to a quarter and year format.

Example 2: Use lubridate Package

The following code shows how to use the quarter() function from the lubridate package to format dates in a

year/quarter format:

```
library(lubridate)library(dplyr)

#convert date to year/quarter format
df %>% mutate(date = quarter(date, with_year = TRUE))
```

```
date sales
1 2022.1 130
2 2022.1 98
3 2022.2 120
4 2022.3 88
5 2022.4 94
6 2022.4 100
```

Each date has been converted to a quarter and year format.

You can also leave out the with_year argument to only display the quarter without the year:

```
library(lubridate)
library(dplyr)

#convert date to quarter format
```

df %>% mutate(date = quarter(date))

date sales
1 1 130
2 1 98
3 2 120
4 3 88
5 4 94
6 4 100

Additional Resources

The following tutorials explain how to perform other common conversions in R: