

How can I convert a character to a timestamp in R?

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To convert a character to a timestamp in R, you can use the `as.POSIXct()` function. This function takes in a character or string and converts it into a timestamp object. It is useful for converting data stored as characters into a format that can be used for date and time calculations. The resulting timestamp will be in the form of seconds since January 1, 1970. This conversion is commonly used in data analysis and visualization tasks. By utilizing the `as.POSIXct()` function, users can easily manipulate and analyze their data based on time and date values.

Convert a Character to a Timestamp in R

You can use the `strptime()` function to convert a character to a timestamp in R. This function uses the following basic syntax:

```
strptime(character, format = "%Y-%m-%d %H:%M:%S")
```

where:

character: The name of the character to be converted
format: The timestamp format to convert the character to

This tutorial provides several examples of how to use this syntax in practice.

Example 1: Convert Character to Year-Month-Day Format

The following code shows how to convert a character to a timestamp with a year-month-date format:

```
#create character variable
```

```
char <- "2021-10-15"
```

```
#display class of character variable
```

```
class(char)
```

```
"character"
```

```
#convert character to timestamp
```

```
time <- strptime(char, "%Y-%m-%d")
```

```
#display timestamp variable
```

```
time
```

```
"2021-10-15 UTC"
```

```
#display class of timestamp variable
```

```
class(time)
```

```
"POSIXlt" "POSIXt"
```

Example 2: Convert Character to Hours-Minutes-Seconds Format

The following code shows how to convert a character to a timestamp with hours, minutes, and seconds included:

```
#create character variable
```

```
char <- "2021-10-15 4:30:00"
```

```
#convert character to timestamp
```

```
time <- strptime(char, "%Y-%m-%d %H:%M:%S")
```

```
#display timestamp variable
```

```
time
```

```
"2021-10-15 04:30:00 UTC"
```

Example 3: Convert Character to Timestamp and Specify Time Zone

The following code shows how to convert a character to a timestamp and specify the time zone as Eastern Standard Time using the `tz` argument:

```
#create character variable
```

```
char <- "2021-10-15"
```

```
#convert character to timestamp with specific time zone
```

```
time <- strptime(char, "%Y-%m-%d", tz="EST")
```

```
#display timestamp variable
```

```
time
```

```
"2021-10-15 EST"
```

Example 4: Convert a Data Frame Column to Timestamp

The following code shows how to convert a column in a data frame from a character to a timestamp:

```
#create data frame
```

```
df <- data.frame(date=c("2021-10-15", "2021-10-19",  
"2021-10-20"),  
sales=c(4, 13, 19))
```

```
#display data frame
```

```
class(df$date)
```

```
"character"
```

```
#convert date column to timestamp
```

```
df$date <- strptime(df$date, "%Y-%m-%d")
```

```
#display class of date column
```

```
class(df$date)
```

```
"POSIXlt" "POSIXt"
```

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