

How can we use the `str_split` function in R?

Authored by
stats writer

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The `str_split` function in R is used to split a string into smaller substrings based on a specified delimiter. This function is useful for manipulating and extracting data from strings in a more efficient manner. To use this function, the string and the delimiter must be specified as parameters. The output is a list of substrings. For example, if we have a string "Hello, world!" and use the comma as the delimiter, the output will be a list with two elements "Hello" and "world!". This function can be particularly useful in data cleaning and preparation tasks.

Use str_split in R (With Examples)

The `str_split()` function from the package in R can be used to split a string into multiple pieces. This function uses the following syntax:

```
str_split(string, pattern)
```

where:

string: Character vector

pattern: Pattern to split on

Similarly, the `str_split_fixed()` function from the `stringr` package can be used to split a string into a fixed number of pieces. This function uses the following syntax:

```
str_split_fixed(string, pattern, n)
```

where:

string: Character vector

pattern: Pattern to split on

n: Number of pieces to return

This tutorial provides examples of how to use each of these functions on the following data frame:

```
#create data frame
```

```
df <- data.frame(team=c('andy & bob', 'carl & doug', 'eric  
& frank'),  
points=c(14, 17, 19))
```

```
#view data frame
```

```
df
```

```
team points
```

```
1 andy & bob 14
```

```
2 carl & doug 17
```

```
3 eric & frank 19
```

Example 1: Split String Using `str_split()`

The following code shows how to split the string in the "team" column using the `str_split()` function:

```
library(stringr)#split the string in the team column on "
```

```
& "  
str_split(df$team, " & ")  
  
]  
"andy" "bob"  
  
]  
"carl" "doug"  
  
]  
"eric" "frank"
```

The result is a list of three elements that show the individual player names on each team.

Example 2: Split String Using `str_split_fixed()`

The following code shows how to split the string in the "team" column into two fixed pieces using the `str_split_fixed()` function:

```
library(stringr)  
  
#split the string in the team column on " & "  
str_split_fixed(df$team, " & ", 2)  
  
"andy" "bob"
```

```
"carl" "doug"  
"eric" "frank"
```

Once useful application of the `str_split_fixed()` function is to append the resulting matrix to the end of the data frame. For example:

```
library(stringr)
```

```
#split the string in the team column and append  
resulting matrix to data frame
```

```
df <- str_split_fixed(df$team, " & ", 2)
```

```
#view data frame
```

```
df
```

```
team points V3 V4
```

```
1 andy & bob 14 andy bob
```

```
2 carl & doug 17 carl doug
```

```
3 eric & frank 19 eric frank
```

The column titled 'V3' shows the name of the first player on the team and the column titled 'V4' shows the name of the second player on the team.

How to Perform Partial String Matching in R

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