

# How to use `str_extract` in R?

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## RECOMMENDED CITATION

stats writer (2025). *How to use `str_extract` in R?*. PSYCHOLOGICAL SCALES. Retrieved from <https://scales.arabpsychology.com/?p=101745>

`str_extract` is a function in the R programming language which is used to extract parts of a string that match a certain pattern. It takes two arguments; the string to extract from and the pattern to match. It returns the part of the string that matches the pattern. This is useful for extracting data from strings in a consistent way.

The **`str_extract()`** function from the package in R can be used to extract matched patterns in a string.

This function uses the following syntax:

**`str_extract(string, pattern)`**

where:

**string:** Character vector

**pattern:** Pattern to extract

The following examples show how to use this function in practice.

### Example 1: Extract One Pattern from String

The following code shows how to extract the string "ther" from a particular string in R:

```
library(stringr)
```

```
#define string  
some_string <- "Hey there my name is Doug"
```

```
#extract "ther" from string  
str_extract(some_string, "ther")
```

```
"ther"
```

The pattern "ther" was successfully extracted from the string.

Note that if we attempt to extract some pattern that doesn't exist in the string, we'll simply receive **NA** as a result:

```
library(stringr)
```

```
#define string  
some_string <- "Hey there my name is Doug"
```

```
#attempt to extract "apple" from string  
str_extract(some_string, "apple")
```

NA

Since the pattern "apple" did not exist in the string, a value of **NA** was returned.

## Example 2: Extract Numeric Values from String

The following code shows how to use the regex `\d+` to extract only the numeric values from a string:

```
library(stringr)
```

```
#define string  
some_string <- "There are 350 apples over there"
```

```
#extract only numeric values from string  
str_extract(some_string, "\d+")
```

"350"

## Example 3: Extract Characters from Vector of Strings

```
library(stringr)
```

```
#define vector of strings  
some_strings <- c("4 apples", "3 bananas", "7 oranges")
```

```
#extract only characters from each string in vector  
str_extract(some_strings, "+")
```

"apples" "bananas" "oranges"

Notice that only the characters from each string are returned.