

# How can I extract the string before a space in R?

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## RECOMMENDED CITATION

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Extracting the string before a space in R refers to the process of retrieving the characters that appear before the first occurrence of a space in a given string. This can be achieved by using the appropriate functions and methods available in the R programming language, such as `strsplit()`, `substr()`, or `gsub()`. This action is commonly used in data manipulation and text analysis tasks, where it is necessary to isolate a specific part of a string for further processing. By extracting the string before a space, users can efficiently access and manipulate their data according to their specific needs.

## Extract String Before Space in R

You can use the following methods to extract a string before a whitespace in R:

### Method 1: Extract String Before Space Using Base R

```
gsub( " .*$", "", my_string)
```

### Method 2: Extract String Before Space Using stringr Package

```
library(stringr)
```

```
word(my_string, 1)
```

Both of these examples extract the string before the first space in the string called `my_string`.

The following examples show how to use each method

in practice with the following data frame:

```
#create data frame
```

```
df <- data.frame(athlete=c('A', 'B', 'C', 'D'),  
distance=c('23.2 miles', '14 miles', '5 miles', '9.3 miles'))
```

```
#view data frame
```

```
df
```

```
athlete distance
```

```
1 A 23.2 miles
```

```
2 B 14 miles
```

```
3 C 5 miles
```

```
4 D 9.3 miles
```

**Example 1: Extract String Before Space Using Base R**

The following code shows how to extract the string before the space in each string in the distance column of the data frame:

```
#create new column that extracts string before space in  
distance column
```

```
df$distance_amount <- gsub( " .*$", "", df$distance)
```

```
#view updated data frame
```

```
df
```

```
athlete distance distance_amount
```

```
1 A 23.2 miles 23.2
```

```
2 B 14 miles 14
```

```
3 C 5 miles 5
```

```
4 D 9.3 miles 9.3
```

Notice that the new column called `distance_amount` contains the string before the space in the strings in the `distance` column of the data frame.

**Related:**

**Example 2: Extract String Before Space Using stringr Package**

The following code shows how to extract the string before the space in each string in the `distance` column of the data frame by using the `word()` function from the `stringr` package in R:

```
library(stringr)
```

```
#create new column that extracts string before space in  
distance column
```

```
df$distance_amount <- word(df$distance, 1)
```

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

```
athlete distance distance_amount
```

```
1 A 23.2 miles 23.2
```

```
2 B 14 miles 14
```

```
3 C 5 miles 5
```

```
4 D 9.3 miles 9.3
```

**Notice that the new column called `distance_amount` contains the string before the space in the strings in the `distance` column of the data frame.**

**Note that the `word()` function from the `stringr` package extracts words from a given string.**

**By supply the value 1 to this function, we're able to extract the first word found in a string which is the equivalent of extracting the string before the first space.**