

# How can I remove the last character from a string using SAS?

Authored by  
**stats writer**

June 25, 2024

## RECOMMENDED CITATION

stats writer (2024). *How can I remove the last character from a string using SAS?*. PSYCHOLOGICAL SCALES. Retrieved from <https://scales.arabpsychology.com/?p=151653>

To remove the last character from a string using SAS, one can use the SUBSTR function. This function allows the user to specify the starting position and the number of characters to be extracted from the string. By setting the starting position to 1 and the number of characters to be extracted to the length of the string minus one, the last character can be effectively removed from the string. This method can be used for various purposes, such as cleaning data or manipulating strings in SAS programming.

## **SAS: Remove Last Character from String**

**The easiest way to remove the last character from a string in SAS is to use the function.**

**You can use the following basic syntax to do so:**

```
data new_data;  
set original_data;  
string_var = substr(string_var, 1, length(string_var)-1);  
run;
```

**This syntax extracts the substring starting from the first character to the second to last character of the string, which has the effect of removing the last character from the string.**

**The following example shows how to use this syntax in practice.**

## Example: Remove Last Character from String in SAS

Suppose we have the following dataset in SAS that contains information about various basketball teams:

```
/*create dataset*/  
data my_data;  
input team $ points;  
datalines;  
Mavsx 113  
Pacersx 95  
Cavsx 120  
Lakersx 114  
Heatx 123  
Kingsx 119  
Raptorsx 105  
Hawksx 95  
Magicx 103  
Spursx 119  
;  
run;  
  
/*view dataset*/  
proc printdata=my_data;
```

Obs	team	points
1	Mavsx	113
2	Pacersx	95
3	Cavsx	120
4	Lakersx	114
5	Heatx	123
6	Kingsx	119
7	Raptorsx	105
8	Hawksx	95
9	Magicx	103
10	Spursx	119

**Notice that each string in the team column contains an x as the last character.**

**We can use the SUBSTR function to remove this last character from each string in the team column:**

```
/*create new dataset where last character in each string  
of team column is removed*/
```

```
data new_data;
```

```
set my_data;
```

```
team = substr(string_var, 1, length(string_var)-1);run;
```

```
/*view new dataset*/
```

```
proc printdata=new_data;
```

Obs	team	points
1	Mavs	113
2	Pacers	95
3	Cavs	120
4	Lakers	114
5	Heat	123
6	Kings	119
7	Raptors	105
8	Hawks	95
9	Magic	103
10	Spurs	119

**Notice that the last character of each string in the team column has been removed.**

**Note that the SUBSTR function uses the following basic syntax:**

**SUBSTR(Source, Position, N)**

**where:**

**Source:** The string to analyze  
**Position:** The starting position to read  
**N:** The number of characters to read

**By using `substr(team, 1, length(team)-1)` we're able to extract the substring from each string in the team column starting from the first character to the second to**

**last character.**

**This has the effect of removing the last character from the string.**

**The following tutorials explain how to perform other common tasks in SAS:**

ARABPSYCHOLOGY.COM