

How can the LENGTH function be utilized in SAS and what are some examples of its usage?

Authored by
stats writer

June 26, 2024

RECOMMENDED CITATION

stats writer (2024). *How can the LENGTH function be utilized in SAS and what are some examples of its usage?*. PSYCHOLOGICAL SCALES. Retrieved from <https://scales.arabpsychology.com/?p=154212>

The LENGTH function in SAS is a useful tool for determining the length of a character variable or string of characters. It can be utilized in various ways, such as calculating the length of a variable, truncating strings to a specific length, or comparing the length of different variables. This function is particularly useful for data manipulation and data cleaning tasks, as it allows for the efficient handling of character data. Some examples of its usage include determining the length of a person's name, limiting the number of characters in a product description, or identifying any discrepancies in the length of data fields. In summary, the LENGTH function plays a crucial role in character data processing and is an essential function in SAS programming.

Use the LENGTH Function in SAS (With Examples)

You can use the LENGTH function in SAS to calculate the length of character variables, excluding trailing blanks.

This function uses the following basic syntax:

LENGTH(expression)

where:

expression: The character string to analyze

The following example shows how to use this function in practice.

Example: Using the LENGTH Function in SAS

Suppose we have the following dataset in SAS:

```
/*create dataset*/  
data original_data;  
input team $1-21 points;  
datalines;  
Golden State Warriors 99  
Brooklyn Nets 101  
Utah Jazz 105  
Cleveland Cavs 100  
Atlanta Hawks 109  
Milwaukee Bucks 98  
Miami Heat 93  
Houston Rockets 100  
Los Angeles Lakers 112  
;  
run;  
  
/*view dataset*/  
proc printdata=original_data;
```

Obs	team	points
1	Golden State Warriors	99
2	Brooklyn Nets	101
3	Utah Jazz	105
4	Cleveland Cavs	100
5	Atlanta Hawks	109
6	Milwaukee Bucks	98
7	Miami Heat	93
8	Houston Rockets	100
9	Los Angeles Lakers	112

We can use the LENGTH function to calculate the length of each string in the team column:

```
/*calculate length of each string in team column*/
```

```
data new_data;
```

```
set original_data;
```

```
team_length = length(team);
```

```
run;
```

```
/*view results*/
```

```
proc printdata=new_data;
```

Obs	team	points	team_length
1	Golden State Warriors	99	21
2	Brooklyn Nets	101	13
3	Utah Jazz	105	9
4	Cleveland Cavs	100	14
5	Atlanta Hawks	109	13
6	Milwaukee Bucks	98	15
7	Miami Heat	93	10
8	Houston Rockets	100	15
9	Los Angeles Lakers	112	18

The new column called `team_length` displays the length of each string in the `team` column.

For example:

The string "Golden State Warriors" has a length of 21. The string "Brooklyn Nets" has a length of 13. The string "Utah Jazz" has a length of 9. The string "Cleveland Cavs" has a length of 14.

And so on.

If you would like to calculate the length of a character variable *including* trailing blanks, use the function `LENGTHC` instead.

The following tutorials explain how to use other common functions in SAS:

ARABPSYCHOLOGY.COM