

How can I concatenate strings in SAS, and what are some examples of how to do so?

Authored by
stats writer

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Concatenating strings in SAS refers to combining two or more strings together to form a single string. This can be useful when working with large datasets and needing to create new variables or labels that are a combination of existing strings. To concatenate strings in SAS, the CAT, CATS, and CATX functions can be used. The CAT function combines strings without adding any spaces, while the CATS function adds a single space between each string. The CATX function allows for a specified delimiter to be inserted between the strings. For example, using the CAT function, the strings "Hello" and "World" can be concatenated to form "HelloWorld". Using the CATS function, the same strings would result in "Hello World". The CATX function could be used to add a comma between the strings, resulting in "Hello, World". Overall, concatenating strings in SAS can help simplify data manipulation and analysis.

Concatenate Strings in SAS (With Examples)

You can use the following methods to quickly concatenate strings in SAS.

Method 1: Concatenate Strings with Space in Between

```
new_variable = CATS(var1, var2);
```

Method 2: Concatenate Strings with No Space in Between

```
new_variable = CAT(var1, var2);
```

Method 3: Concatenate Strings with Custom Delimiter

```
new_variable = CATX("-", var1, var2);
```

The following examples show how to use each method with the following dataset in SAS:

```
/*create dataset*/  
data my_data1;  
input firstName $ lastName $ points;  
datalines;  
Austin Smith 15  
Brad Stevens 31  
Chad Miller 22  
Dave Michaelson 19  
Eric Schmidt 29  
Frank Wright 20  
Greg Gunner 40  
Harold Anderson 35  
;  
run;  
  
/*view dataset*/  
proc printdata=my_data1;
```

Obs	firstName	lastName	points
1	Austin	Smith	15
2	Brad	Stevens	31
3	Chad	Miller	22
4	Dave	Michaels	19
5	Eric	Schmidt	29
6	Frank	Wright	20
7	Greg	Gunner	40
8	Harold	Anderson	35

Example 1: Concatenate Strings with Space in Between

The following code shows how to create a new column called `fullName` that concatenates the `firstName` and `lastName` columns using a blank space as a delimiter:

```
/*create new dataset with concatenated strings*/  
data my_data2;  
set my_data1;  
fullName = CAT(firstName, lastName);  
run;  
  
/*view new dataset*/  
proc printdata=my_data2;
```

Obs	firstName	lastName	points	fullName
1	Austin	Smith	15	Austin Smith
2	Brad	Stevens	31	Brad Stevens
3	Chad	Miller	22	Chad Miller
4	Dave	Michaels	19	Dave Michaels
5	Eric	Schmidt	29	Eric Schmidt
6	Frank	Wright	20	Frank Wright
7	Greg	Gunner	40	Greg Gunner
8	Harold	Anderson	35	Harold Anderson

Example 2: Concatenate Strings with No Space in Between

The following code shows how to create a new column called `fullName` that concatenates the `firstName` and `lastName` columns using no space as a delimiter:

```
/*create new dataset with concatenated strings*/  
data my_data2;  
set my_data1;  
fullName = CATS(firstName, lastName);  
run;  
  
/*view new dataset*/  
proc printdata=my_data2;
```

Obs	firstName	lastName	points	fullName
1	Austin	Smith	15	AustinSmith
2	Brad	Stevens	31	BradStevens
3	Chad	Miller	22	ChadMiller
4	Dave	Michaels	19	DaveMichaels
5	Eric	Schmidt	29	EricSchmidt
6	Frank	Wright	20	FrankWright
7	Greg	Gunner	40	GregGunner
8	Harold	Anderson	35	HaroldAnderson

Example 3: Concatenate Strings with Custom Delimiter

The following code shows how to create a new column called `fullName` that concatenates the `firstName` and `lastName` columns using a dash as a delimiter:

```
/*create new dataset with concatenated strings*/  
data my_data2;  
set my_data1;  
fullName = CATX("-", firstName, lastName);  
run;  
  
/*view new dataset*/  
proc printdata=my_data2;
```

Obs	firstName	lastName	points	fullName
1	Austin	Smith	15	Austin-Smith
2	Brad	Stevens	31	Brad-Stevens
3	Chad	Miller	22	Chad-Miller
4	Dave	Michaels	19	Dave-Michaels
5	Eric	Schmidt	29	Eric-Schmidt
6	Frank	Wright	20	Frank-Wright
7	Greg	Gunner	40	Greg-Gunner
8	Harold	Anderson	35	Harold-Anderson

Additional Resources

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