

How can I use SAS to convert a numeric value to a character value with leading zeros?

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SAS is a powerful data analysis tool that can be used to convert a numeric value to a character value with leading zeros. This can be achieved by using the appropriate SAS functions and formats, such as the PUT function and the Z format. The PUT function converts a numeric value to a character value, while the Z format adds leading zeros to the converted value. By combining these functions and formats, users can efficiently convert numeric values to character values with leading zeros, ensuring consistency and accuracy in their data analysis. This feature of SAS is particularly useful in situations where leading zeros are necessary, such as in data sets containing identification numbers or codes. With its flexibility and functionality, SAS offers a convenient solution for converting numeric values to character values with leading zeros.

SAS: Convert Numeric to Character with Leading Zeros

You can use the following basic syntax to convert a numeric variable to a character variable with a specific amount of leading zeros in SAS:

```
data new_data;  
set original_data;  
employee_ID = put(employee_ID, z10.);  
format employee_ID z10.;  
run;
```

This particular example converts the numeric variable called employee_ID into a character variable with enough leading zeros to make employee_ID have a length equal to 10.

The following example shows how to use this syntax in

practice.

Example: Convert Numeric to Character with Leading Zeros in SAS

Suppose we have the following dataset in SAS that shows the total sales made by various employees at some company:

```
/*create dataset*/  
data original_data;  
input employee_ID sales;  
datalines;  
4456 12  
4330 18  
2488 19  
2504 11  
2609 33  
2614 30  
2775 23  
2849 14  
;  
  
/*view dataset*/  
proc printdata=original_data;
```

Obs	employee_ID	sales
1	4456	12
2	4330	18
3	2488	19
4	2504	11
5	2609	33
6	2614	30
7	2775	23
8	2849	14

Now suppose we would like to convert the variable called `employee_ID` to a character variable with enough leading zeros to make each value in the column have a length of 10.

We can use the following syntax to do so:

```
/*create new dataset with employee_ID as character  
with leading zeros*/  
data new_data;  
set original_data;  
employee_ID = put(employee_ID, z10.);  
format employee_ID z10.;  
run;  
  
/*view new dataset*/  
proc printdata=new_data;
```

Obs	employee_ID	sales
1	0000004456	12
2	0000004330	18
3	0000002488	19
4	0000002504	11
5	0000002609	33
6	0000002614	30
7	0000002775	23
8	0000002849	14

We can see that the employee_ID variable in the new dataset contains enough leading zeros to make each of the values have a length of 10.

To add a different number of leading zeros, simply change z10 to a different value.

For example, we could use z15 to add enough leading zeros to make each of the values in the employee_ID column have a length of 15:

```
/*create new dataset with employee_ID as character  
with leading zeros*/
```

```
data new_data;
```

```
set original_data;
```

```
employee_ID = put(employee_ID, z15.);
```

```
format employee_ID z15.;
```

```
run;
```

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

```
proc printdata=new_data;
```

Obs	employee_ID	sales
1	0000000000004456	12
2	0000000000004330	18
3	0000000000002488	19
4	0000000000002504	11
5	0000000000002609	33
6	0000000000002614	30
7	0000000000002775	23
8	0000000000002849	14

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