

How can I convert a numeric variable to a character variable using the SAS programming language?

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The process of converting a numeric variable to a character variable in the SAS programming language involves using the appropriate SAS functions and formats. This allows for the manipulation of numerical data into a string of characters, which can be useful for certain analyses and reporting purposes. By using the correct syntax and techniques, the conversion can be done accurately and efficiently in SAS. It is important to note that the resulting character variable may have limitations in terms of mathematical operations and sorting compared to a numeric variable.

SAS: Convert Numeric Variable to Character

You can use the put() function in SAS to convert a numeric variable to a character variable.

This function uses the following basic syntax:

```
character_var = put(numeric_var, 8.);
```

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

Related:

Example: Convert Numeric Variable to Character in SAS

Suppose we have the following dataset in SAS that shows the total sales made by some store during 10 consecutive days:

```
/*create dataset*/  
data original_data;
```

```
input day sales;
```

```
datalines;
```

```
1 7
```

```
2 12
```

```
3 15
```

```
4 14
```

```
5 13
```

```
6 11
```

```
7 10
```

```
8 16
```

```
9 18
```

```
10 24
```

```
;
```

```
run;
```

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

```
proc printdata=original_data;
```

Obs	day	sales
1	1	7
2	2	12
3	3	15
4	4	14
5	5	13
6	6	11
7	7	10
8	8	16
9	9	18
10	10	24

We can use proc contents to view the data type of each variable in the dataset:

```
/*display data type for each variable*/proc  
contentsdata=original_data;
```

#	Variable	Type	Len
1	day	Num	8
2	sales	Num	8

We can see that day and sales are both numeric variables.

We can use the following code to create a new dataset in which we convert the day variable from numeric to

character:

```
/*create new dataset where 'day' is character*/
```

```
data new_data;
```

```
set original_data;
```

```
char_day = put(day, 8.);
```

```
drop day;
```

```
run;
```

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

```
proc printdata=new_data;
```

Obs	sales	char_day
1	7	1
2	12	2
3	15	3
4	14	4
5	13	5
6	11	6
7	10	7
8	16	8
9	18	9
10	24	10

Note: We used the drop function to drop the original day variable from the dataset.

```
/*display data type for each variable in new dataset*/
```

```
proc contents data=new_data;
```

Alphabetic List of Variables and Attributes			
#	Variable	Type	Len
2	char_day	Char	8
1	sales	Num	8

We can see that the new variable we created, char_day, is a character variable.

Additional Resources

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