

How can I use a CASE WHEN statement in SAS?

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A CASE WHEN statement in SAS is a conditional logic statement that allows you to specify different actions based on specified conditions. It follows the general syntax of "CASE WHEN condition1 THEN action1; WHEN condition2 THEN action2; ELSE default action;" This statement is commonly used in data manipulation tasks, such as data cleaning and transformation, to programmatically handle different scenarios and perform the appropriate actions. It provides a more efficient and simplified way to write conditional statements compared to traditional IF-THEN-ELSE statements. Additionally, the CASE WHEN statement can be nested within other SAS statements, making it a versatile tool for data analysis and manipulation.

Use a CASE WHEN Statement in SAS (With Examples)

We can use the CASE statement in SAS to create a new variable that uses case-when logic to determine the values to assign to the new variable.

This statement uses the following basic syntax:

```
proc sql;  
select var1, casewhen var2 = 'A' then 'North'  
when var2 = 'B' then 'South'  
when var2 = 'C' then 'East'  
else 'West'  
end as variable_name  
from my_data;  
quit;
```

The following example shows how to use the CASE statement in practice.

Example: Using the CASE Statement in SAS

Suppose we have the following dataset in SAS:

```
/*create dataset*/  
data original_data;  
input team $ points rebounds;  
datalines;  
A 25 8  
A 18 12  
A 22 6  
B 24 11  
B 27 14  
C 33 19  
C 31 20  
D 30 17  
D 18 22  
;  
run;  
  
/*view dataset*/  
proc printdata=original_data;
```

Obs	team	points	rebounds
1	A	25	8
2	A	18	12
3	A	22	6
4	B	24	11
5	B	27	14
6	C	33	19
7	C	31	20
8	D	30	17
9	D	18	22

We can use the following CASE statement to create a new variable called Division whose values are based on the values of the team variable:

```
/*create dataset*/  
proc sql;  
select team, points, casewhen team = 'A' then 'North'  
when team = 'B' then 'South'  
when team = 'C' then 'East'  
else 'West'  
endas Division  
from original_data;  
quit;
```

team	points	Division
A	25	North
A	18	North
A	22	North
B	24	South
B	27	South
C	33	East
C	31	East
D	30	West
D	18	West

Note that a new variable Division was created whose values are based on the values for the team variable.

Additional Resources

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