How to Perform Frequency Analysis in R Like SAS PROC FREQ

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The SAS PROC FREQ command is a statistical tool used for frequency analysis in SAS software. In R, the equivalent command for this is the "table()" function, which also provides frequency counts and percentages for categorical variables. Both commands allow for the exploration of data distribution and identification of patterns and trends.

Use Equivalent of SAS PROC FREQ in R

In SAS, you can use PROC FREQ to calculate frequencies for variables.

The easiest way to replicate this functionality in the R programming language is by using the table function.

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

Example: How to Use Equivalent of SAS PROC FREQ in R

Suppose we have the following data frame in R that contains information about points scored by basketball players on various teams and positions:

```
#create data frame
df <- data.frame(team=c('A', 'A', 'A', 'A', 'B', 'B', 'B', 'B'),
position=c('G', 'G', 'G', 'F', 'G', 'F', 'F', 'C'),
points=c(23, 18, 14, 14, 13, 19, 34, 28))

#view data frame
```

df

team position points
1 A G 23
2 A G 18
3 A G 14
4 A F 14
5 B G 13
6 B F 19
7 B F 34
8 B C 28

We can use the following code to calculate the frequency of each unique value in the position column:

```
#calculate frequency of each unique value in 'position' column
table(df$position)
```

C F G
1 3 4

The output shows the frequency of each unique value in the position column.

For example, we can see:

The value C occurs 1 time.The value F occurs 3 times.The value G occurs 4 times.

If you would like to view the frequencies as percentages, you can use the prop.table function as follows:

```
#calculate frequency percentage of each unique value in 'position' column
prop.table(table(df$position))

C F G
0.125 0.375 0.500
```

The output shows the frequency percentage of each unique value in the position column.

For example, we can see:

The value C represents 12.5% of all values in the position column.The value F represents 37.5% of all values in the position column.The value G represents 50% of all values in the position column.

Lastly, if you'd like to create a two-way frequency table in R then you can include the names of two columns in the table function as follows:

```
#calculate frequencies of values in team and position columns
table(df$team, df$position)
```

```
  C F G
A 0 1 3
B 1 2 1
```

The output shows the frequency of each unique combination of values in the team and position columns.

For example, we can see:

There were 0 occurrences of position C on team A.There was 1 occurrence of position F on team A.There were 3 occurrences of position G on team A.

And so on.

How to Create Tables in R