How do I create frequency tables in R with examples?

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Frequency tables are an effective way to summarize and organize categorical data in R. To create a frequency table in R, you can use the "table" function which takes in a vector of values and counts the number of occurrences for each unique value. For example, if you have a vector called "grades" with values of "A", "B", "C", and "D", the frequency table would display the number of students who received each grade.

Another way to create a frequency table is by using the "count" function from the "dplyr" package. This function allows you to group and count the occurrences of a specific variable in a data frame.

Overall, frequency tables are a useful tool for visualizing and understanding categorical data in R. By using the appropriate functions and packages, you can easily create frequency tables to analyze and interpret your data.

Create Frequency Tables in R (With Examples)

A frequency table is a table that displays the frequencies of different categories. This type of table is particularly useful for understanding the distribution of values in a dataset.

This tutorial explains how to create frequency tables in R using the following data frame:

```
#make this example reproducible
set.seed(0)

#create data frame
df <- data.frame(store=rep(c('A', 'B', 'C'), each=3),
sales=round(runif(9, 2, 6), 0),
returns=round(runif(9, 1, 3), 0))
```

#view data frame

df

store sales returns

1 A 6 2

2 A 3 1

3 A 3 1

4 B 4 1

5 B 6 2

6 B 3 2

7 C 6 3

8 C 6 2

9 C 5 2

One-Way Frequency Tables in R

The following code shows how to create a one-way frequency table in R for the variable *store*:

#calculate frequency of each store

table(df$store)

A B C

3 3 3

This table simply tells us:

Store A appears 3 times in the data frame.Store B appears 3 times in the data frame.Store C appears 3 times in the data frame.

Two-Way Frequency Tables in R

The following code shows how to create a two-way frequency table in R for the variables *store* and *sales*:

```
#calculate two-way frequency table
table(df$store, df$sales)
```

```
  3 4 5 6
A 2 0 0 1
B 1 1 0 1
C 0 0 1 2
```

This table tells us:

Store A made 3 sales on 2 different occasions.Store A made 4 sales on 0 occassions.Store A made 5 sales on 0 occassions.Store A made 1 sale on 1 occassions.

And so on.

Three-Way Frequency Tables in R

The following code shows how to create a three-way frequency table for all three variables in our data frame:

```
#calculate three-way frequency table
table(df$store, df$sales, df$returns)

, , = 1

  3 4 5 6
A 2 0 0 0
B 0 1 0 0
C 0 0 0 0

, , = 2

  3 4 5 6
A 0 0 0 1
B 1 0 0 1
C 0 0 1 1

, , = 3

  3 4 5 6
A 0 0 0 0
```

B 0 0 0 0

C 0 0 0 1

Note that R can make frequency tables for even higher dimensions (e.g. 4-way frequency tables, 5-way frequency tables) but the output can become quite large for higher dimensions.

In practice, one-way and two-way frequency tables are used most often.

How to Create Tables in R

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