How can I sort a table in R, and what are some examples of doing so?

Authored by

stats writer

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Sorting a table in R refers to arranging the rows or columns of a data table in a specific order based on one or more variables. This can be done using the `sort()` function, which allows for sorting by a single variable or multiple variables in ascending or descending order. Another option is to use the `order()` function to generate a vector of indices that can be used to reorder the rows or columns of the table.

Some examples of sorting a table in R include arranging a data frame of student grades in descending order based on their test scores, sorting a data table of sales data in ascending order based on the date, or organizing a data frame of employee information in alphabetical order by last name. Overall, sorting a table in R is a useful tool for organizing and analyzing data in a more meaningful way.

Sort a Table in R (With Examples)

There are two methods you can use to sort a table in R:

Method 1: Use Base R

#sort table in ascending ordermy_table_sorted <- my_table

#sort table in descending order
my_table_sorted <- my_table

Method 2: Use dplyr

library(dplyr)

#sort table in ascending ordermy_table_sorted<- my_table %>% as.data.frame() %>% arrange(Freq)

#sort table in descending order
my_table_sorted<- my_table %>% as.data.frame() %>% arrange(desc(Freq))

The following examples show how to use each method in practice with the following table in R:

#create vector
data <- c(3, 8, 8, 8, 7, 7, 5, 5, 5, 5, 9, 12, 15, 15)

#create table
my_table <- table(data)

#view table
my_table

data
3 5 7 8 9 12 15
1 4 2 3 1 1 2

Example 1: Sort Table Using Base R

We can use the following code to sort the values in the table in ascending order using the order() function from base R:

#sort table in ascending order
my_table_sorted <- my_table

#view sorted table
my_table_sorted

data
3 9 12 7 15 8 5
1 1 1 2 2 3 4

And we can use the argument decreasing=True in the order() function to sort the values in the table in descending order:

#sort table in descending order
my_table_sorted <- my_table

#view sorted table
my_table_sorted
data
5 8 7 15 3 9 12
4 3 2 2 1 1 1

Example 2: Sort Table Using dplyr

We can use the following code to sort the values in the table in ascending order using the arrange() function from the dplyr package:

```
library(dplyr)

#sort table in ascending order
my_table_sorted <- my_table %>% as.data.frame() %>%
arrange(Freq)

#view sorted table
my_table_sorted
```

```
data Freq
1 3 1
2 9 1
3 12 1
4 7 2
5 15 2
6 8 3
7 5 4
```

And we can use the desc() function to sort the values in the table in descending order:

```
library(dplyr)

#sort table in descending order
my_table_sorted <- my_table %>% as.data.frame() %>%
arrange(desc(Freq))

#view sorted table
my_table_sorted
```

```
  data Freq
1    1    5
2    4    8
3    3    7
4    2   15
5    5    3
6    6    9
7    7   12
```