

How can I use the row.names attribute to sort a data frame in R?

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The row.names attribute in R allows users to specify and assign names to the rows in a data frame. This attribute can then be used to sort the data frame based on the assigned row names. By using the row.names attribute, users can easily organize and rearrange their data frame in a desired order, making it easier to analyze and interpret the data. This feature is particularly useful for large data sets with multiple rows, as it provides a more efficient and organized way to navigate and manipulate the data. Overall, the row.names attribute is a useful tool in R for sorting and managing data frames.

R: Sort Data Frame Using row.names Attribute

You can use the following two methods to sort a data frame in R by using the row.names attribute:

Method 1: Sort Using Character row.names

df

Method 2: Sort Using Numeric row.names

df

The following examples shows how to use each method in practice.

Example 1: Sort Data Frame Using Character row.names

Suppose we have the following data frame in R:

#create data frame

```
df <- data.frame(position=c('G', 'G', 'F', 'F', 'C'),
points=c(99, 90, 86, 88, 95),
assists=c(33, 28, 31, 39, 34),
rebounds=c(30, 28, 24, 24, 28))
```

```
#set row names of data frame
```

```
row.names(df) <- c('A', 'C', 'E', 'D', 'B')
```

```
#view data frame
```

```
df
```

```
position points assists rebounds
```

```
A G 99 33 30
```

```
C G 90 28 28
```

```
E F 86 31 24
```

```
D F 88 39 24
```

```
B C 95 34 28
```

We can use the following syntax to sort the rows of the data frame alphabetically using the row.names attribute:

```
#sort rows alphabetically using row.names
```

```
df
```

position points assists rebounds

A G 99 33 30

B C 95 34 28

C G 90 28 28

D F 88 39 24

E F 86 31 24

The rows are sorted from A to Z based on the row name value.

You can also use the `decreasing=TRUE` argument to sort from Z to A:

```
#sort rows from Z to A using row.names  
df
```

position points assists rebounds

E F 86 31 24

D F 88 39 24

C G 90 28 28

B C 95 34 28

A G 99 33 30

Example 2: Sort Data Frame Using Numeric row.names

Suppose we have the following data frame in R:

```
#create data frame
```

```
df <- data.frame(position=c('G', 'G', 'F', 'F', 'C'),  
points=c(99, 90, 86, 88, 95),  
assists=c(33, 28, 31, 39, 34),  
rebounds=c(30, 28, 24, 24, 28))
```

```
#set row names of data frame
```

```
row.names(df) <- c(1, 100, 4, 12, 19)
```

```
#view data frame
```

```
df
```

```
position points assists rebounds
```

```
1 G 99 33 30
```

```
100 G 90 28 28
```

```
4 F 86 31 24
```

```
12 F 88 39 24
```

```
19 C 95 34 28
```

```
#sort by row names from smallest to largest
```

```
df
```

```
position points assists rebounds
```

1 G 99 33 30

4 F 86 31 24

12 F 88 39 24

19 C 95 34 28

100 G 90 28 28

We could also use `decreasing=TRUE` to sort from largest to smallest:

```
#sort by row names from largest to smallest  
df
```

```
position points assists rebounds
```

100 G 90 28 28

19 C 95 34 28

12 F 88 39 24

4 F 86 31 24

1 G 99 33 30

Additional Resources