

How can I count the number of occurrences in columns in R?

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Counting the number of occurrences in columns is a common task in data analysis and can be easily done in R. To do so, one can use the "table()" function, which creates a frequency table for categorical data. This function takes in a vector or list of values and returns a table with the number of occurrences for each unique value. By applying this function to each column of the data frame, one can easily count the number of occurrences in each column. Additionally, the "sum()" function can be used to calculate the total number of occurrences in a column by summing up the values in the frequency table. Overall, these functions provide a simple and efficient way to count the number of occurrences in columns in R.

Count Number of Occurrences in Columns in R

You can use the following syntax in R to count the number of occurrences of certain values in columns of a data frame:

#count number of occurrences of each value in column
table(df\$column_name)

#count number of occurrences of each value (including NA values) in column
table(df\$column_name, useNA = 'always')

#count number of occurrences of specific value
length(which(df\$column_name==value))

The following examples show how to use this syntax in practice with the following data frame:

```
#create data frame  
df <- data.frame(player=c('A', 'B', 'C', 'D', 'E', 'F'),  
team=c('Mavs', 'Mavs', 'Suns', 'Nets', 'Nets', 'Nets'),  
points=c(20, 22, 26, 30, 30, NA))
```

```
#view data frame
```

```
df
```

```
player team points
```

```
1 A Mavs 20
```

```
2 B Mavs 22
```

```
3 C Suns 26
```

```
4 D Nets 30
```

```
5 E Nets 30
```

```
6 F Nets NA
```

Example 1: Count Occurrences of Values in Column

The following code shows how to count the number of occurrences of each value in the 'team' column:

```
#count number of occurrences of each team
```

```
table(df$team)
```

```
Mavs Nets Suns
```

```
2 3 1
```

This tells us:

The team name 'Mavs' appears 2 times. The team name 'Nets' appears 3 times. The team name 'Suns' appears 1 time.

Example 2: Count Occurrences of Values in Column (Including NA Values)

The following code shows how to count the number of occurrences of each value (including NA values) in the 'points' column:

```
#count number of occurrences of each value in 'points',  
including NA occurrences  
table(df$points, useNA = 'always')
```

```
20 22 26 30 <NA>  
1 1 1 2 1
```

This tells us:

The value 20 appears 1 time. The value 22 appears 1 time. The value 26 appears 1 time. The value 30 appears 2 times. The value NA (missing value) appears 1 time.

Example 3: Count Occurrences of Specific Value in Column

The following code shows how to count the number of occurrences of the value 30 in the 'points' column:

```
#count number of occurrences of the value 30 in  
'points' column  
length(which(df$points == 30))
```

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You can also use the following syntax to count the number of occurrences of several different values in the 'points' column:

```
#count number of occurrences of the value 30 or 26 in  
'points' column  
length(which(df$points == 30 | df$points == 26))
```

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This tells us that the value 30 or 26 appear a total of 3 times in the 'points' column.