How can I format numbers as percentages in R, and could you provide some examples?

Authored by

stats writer

April 25, 2024

RECOMMENDED CITATION

stats writer (2024). *How can I format numbers as percentages in R, and could you provide some examples?*. PSYCHOLOGICAL SCALES. Retrieved from https://scales.arabpsychology.com/?p=139145

ARABPSYCHOLOGY.COM

To format numbers as percentages in R, you can use the "percent" function or the "sprintf" function. The "percent" function converts a numeric value into a percentage with a specified number of decimal places, while the "sprintf" function allows for more customization in formatting. Both functions return a character vector with the percentage symbol included.

For example, using the "percent" function:
percent(0.35, decimals = 2) will return "35.00%"

Using the "sprintf" function:
sprintf("%.2f%%", 0.35) will also return "35.00%"

Other options for formatting percentages in R include using the "formatC" function or the "format" function with the argument "percent = TRUE". These functions allow for further customization such as specifying the thousands separator or whether to include a space between the number and percentage symbol.

Overall, formatting numbers as percentages in R is a simple and efficient process, providing flexibility for displaying data in different formats.

Format Numbers as Percentages in R (With Examples)

The easiest way to format numbers as percentages in R is to use the percent() function from the package. This function uses the following syntax:

percent(x, accuracy = 1)

where:

x: The object to format as a percentage.accuracy: A number to round to. For example, use .01 to round to two decimal places.

ARABPSYCHOLOGY.COM

This tutorial provides several examples of how to use this function in practice.

Example 1: Format Percentages in a Vector

The following code shows how to format numbers as percentages in a vector:

```
library(scales)

#create data
data <- c(.3, .7, .14, .18, .22, .78)

#format numbers as percentages
percent(data, accuracy = 1)

"30%" "70%" "14%" "18%" "22%" "78%"

#format numbers as percentages with one decimal place
percent(data, accuracy = 0.1)

"30.0%" "70.0%" "14.0%" "18.0%" "22.0%" "78.0%"

#format numbers as percentages with two decimal places
percent(data, accuracy = 0.01)
```

ARABPSYCHOLOGY.COM

"30.00%" "70.00%" "14.00%" "18.00%" "22.00%" "78.00%"

Example 2: Format Percentages in a Data Frame Column

The following code shows how to format numbers as percentages in a column of a data frame:

```
library(scales)

#create data frame
df = data.frame(region = c('A', 'B', 'C', 'D'),
growth = c(.3, .7, .14, .18))

#view data frame
df

region growth
1 A 0.30
2 B 0.70
3 C 0.14
4 D 0.18

#format numbers as percentages in growth column
df$growth <- percent(df$growth, accuracy=1)
```

ARABPSYCHOLOGY.COM

```
#view updated data frame
df

region growth
1 A 30%
2 B 70%
3 C 14%
4 D 18%
```

Example 3: Format Percentages in Multiple Data Frame Columns

The following code shows how to format numbers as percentages in multiple columns of a data frame:

```
library(scales)

#create data frame
df = data.frame(region = c('A', 'B', 'C', 'D'),
growth = c(.3, .7, .14, .18),
trend = c(.04, .09, .22, .25))

#view data frame
df
region growth trend
1 A 0.30 0.04
2 B 0.70 0.09
```

ARABPSYCHOLOGY.COM

3 C 0.14 0.22

4 D 0.18 0.25

#format numbers as percentages in growth and trend columns

df <- sapply(df, function(x) percent(x, accuracy=1))

#view updated data frame

df

region growth trend

1 A 30% 4%

2 B 70% 9%

3 C 14% 22%

4 D 18% 25%

You can find more R tutorials on .

ARABPSYCHOLOGY.COM