

How can I create a plot in ggplot2 using multiple data frames?

Authored by
stats writer

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Creating a plot in ggplot2 using multiple data frames involves combining data from multiple sources to generate a single visual representation. This can be achieved by first importing the different data frames into R and then using the "ggplot" function to create the plot. By specifying the desired variables and data frames within the ggplot function, the data can be merged and displayed together in the plot. This allows for a more comprehensive and holistic analysis of the data, providing deeper insights and understanding of the information at hand.

Create Plot in ggplot2 Using Multiple Data Frames

You can use the following basic syntax to create a plot in ggplot2 using multiple data frames:

```
library(ggplot2)
```

```
ggplot() +
```

```
geom_line(data=df1, aes(x=x_var, y=y_var),  
color='blue') +
```

```
geom_line(data=df2, aes(x=x_var, y=y_var), color='red')
```

This particular example plots multiple lines in a single plot in ggplot2 using data from two different data frames.

By specifying the data frame names at the geom() level, we're able to include data from multiple data frames in a single plot.

The following example shows how to use this syntax in

practice.

Example: Create Plot in ggplot2 Using Multiple Data Frames

Suppose we have the following two data frames in R that contain information on the total sales made at two different stores on various days:

```
#create first data frame
```

```
df1 <- data.frame(day=1:8,  
sales=c(6, 8, 9, 14, 13, 13, 7, 10))
```

```
df1
```

```
day sales
```

```
1 1 6
```

```
2 2 8
```

```
3 3 9
```

```
4 4 14
```

```
5 5 13
```

```
6 6 13
```

```
7 7 7
```

```
8 8 10
```

```
#create second data frame
```

```
df2 <- data.frame(day=1:8,
```

```
sales=c(2, 3, 3, 5, 7, 6, 5, 9))
```

```
df2
```

```
day sales
```

```
1 1 2
```

```
2 2 3
```

```
3 3 3
```

```
4 4 5
```

```
5 5 7
```

```
6 6 6
```

```
7 7 5
```

```
8 8 9
```

We can use the following syntax to create a plot in ggplot2 that contains multiple lines to represent the sales from the stores in both data frames:

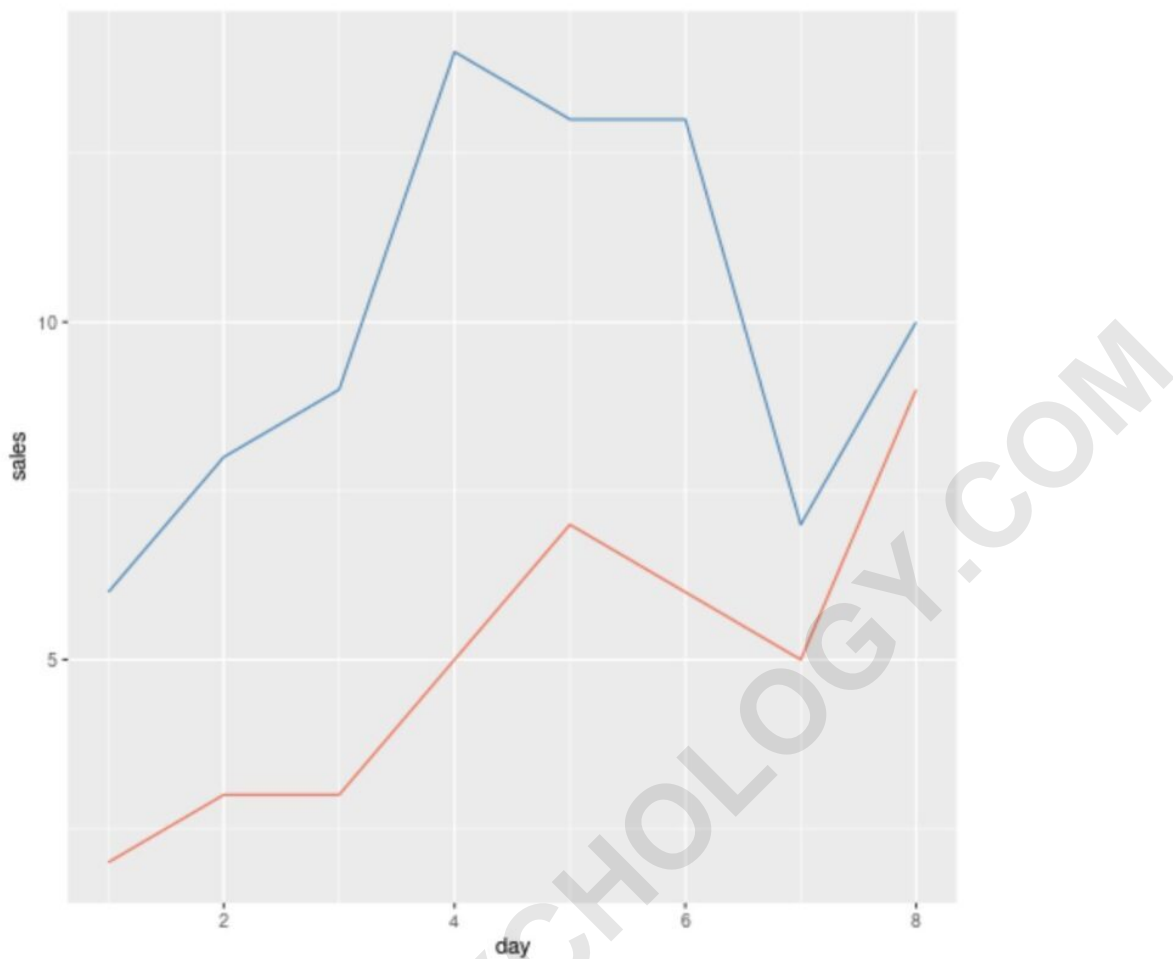
```
library(ggplot2)
```

```
#create line plot using multiple data frames
```

```
ggplot() +
```

```
geom_line(data=df1, aes(x=day, y=sales),  
color='steelblue') +
```

```
geom_line(data=df2, aes(x=day, y=sales), color='coral2')
```



The blue line represents the values from the data frame called df1 and the red line represents the values from the data frame called df2.

Note that this method also works with other geom() functions.

For example, we could create the following scatter plot to display the sales by store from each data frame:

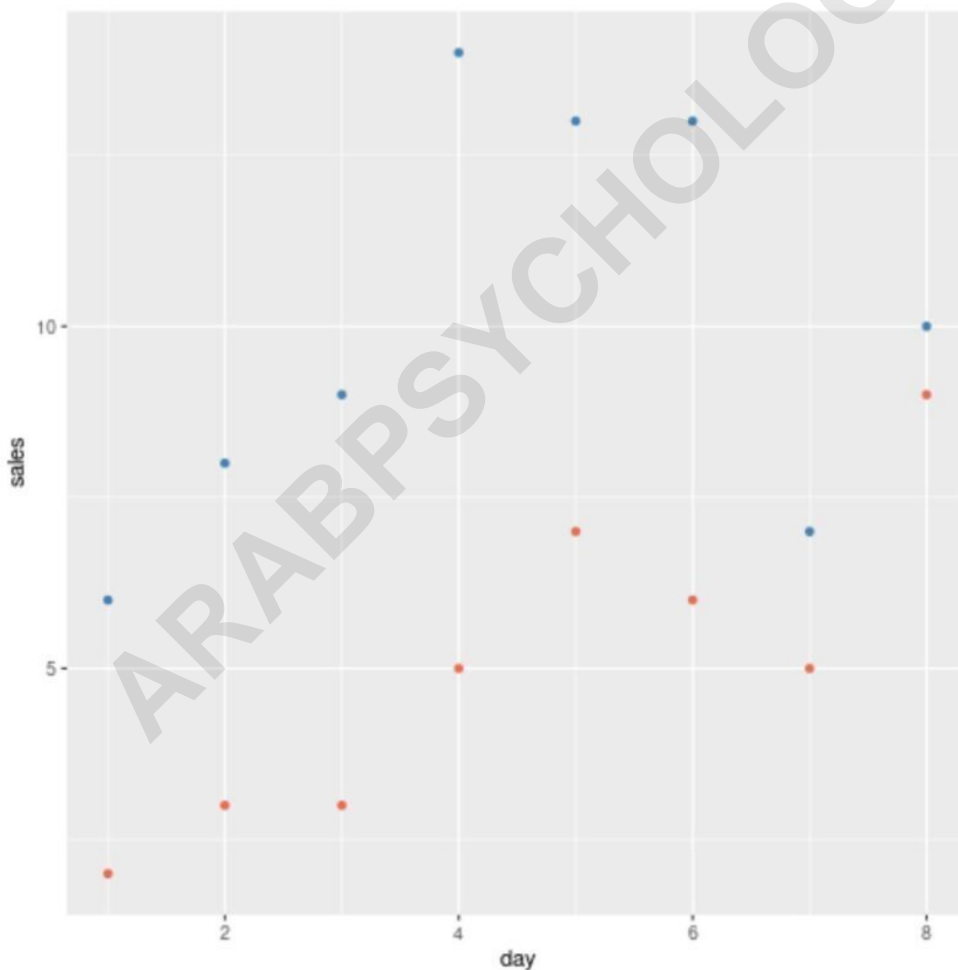
```
library(ggplot2)
```

```
#create scatter plot using multiple data frames
```

```
ggplot() +
```

```
  geom_point(data=df1, aes(x=day, y=sales),  
            color='steelblue') +
```

```
  geom_point(data=df2, aes(x=day, y=sales),  
            color='coral2')
```



The blue points represent the values from the data

frame called df1 and the red points represent the values from the data frame called df2.

The following tutorials explain how to perform other common tasks in ggplot2:

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