

How can I use the text() function in R to add text to a plot?

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The text() function in R is a useful tool for adding text to a plot. It allows users to specify the location and content of the text, as well as customize its appearance. This can be helpful for labeling different parts of a plot, adding a title or caption, or providing additional information to enhance the understanding of the data being presented. By using the text() function, users can easily incorporate text elements into their plots, making them more informative and visually appealing.

Use text() Function in R to Add Text to Plot

You can use the text() function to add text to a plot in base R.

This function uses the following basic syntax:

```
text(x, y, "my text")
```

where:

x, y: The (x, y) coordinates where the text should be placed.

The following examples show how to use this function in practice.

Example 1: Add One Text Element to Plot

The following code shows how to use text() to add one text element to a plot at (x, y) coordinates of (5, 18):

```
#create data frame with values to plot
```

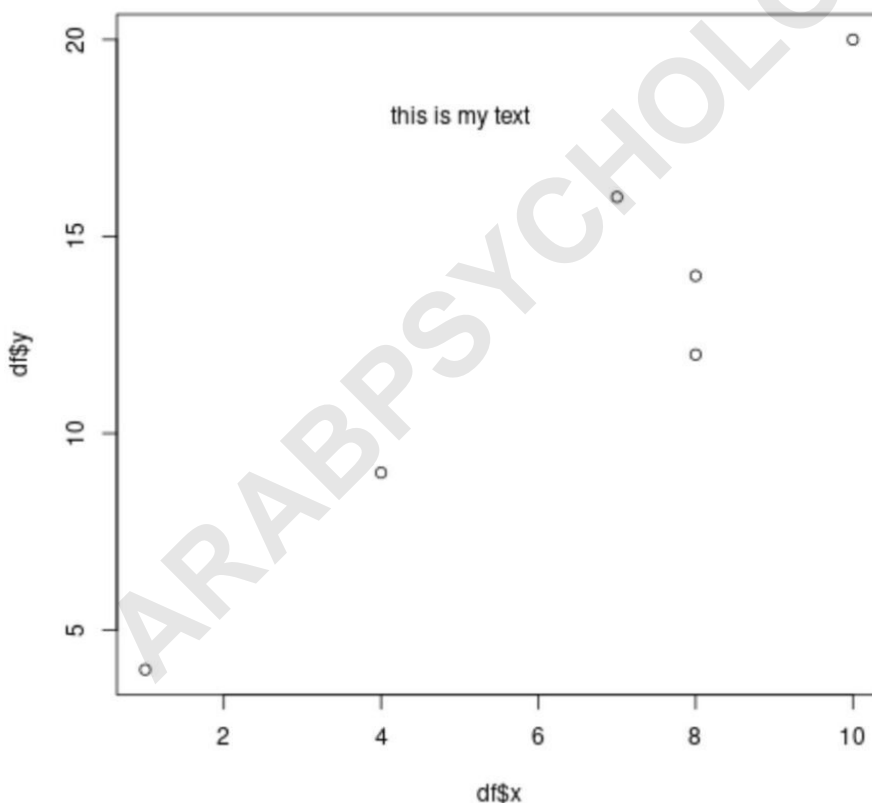
```
df <- data.frame(x=c(1, 4, 7, 8, 8, 10),  
y=c(4, 9, 16, 14, 12, 20))
```

```
#create scatterplot
```

```
plot(df$x, df$y)
```

```
#add text element at (5, 18)
```

```
text(x=5, y=18, "this is my text")
```



Notice that our text element has been added to the (x, y) coordinates of (5, 18) in the plot.

Example 2: Add Multiple Text Elements to Plot

To add multiple text elements to a plot, we can simply use multiple text() functions:

```
#create data frame with values to plot
```

```
df <- data.frame(x=c(1, 4, 7, 8, 8, 10),  
y=c(4, 9, 16, 14, 12, 20))
```

```
#create scatterplot
```

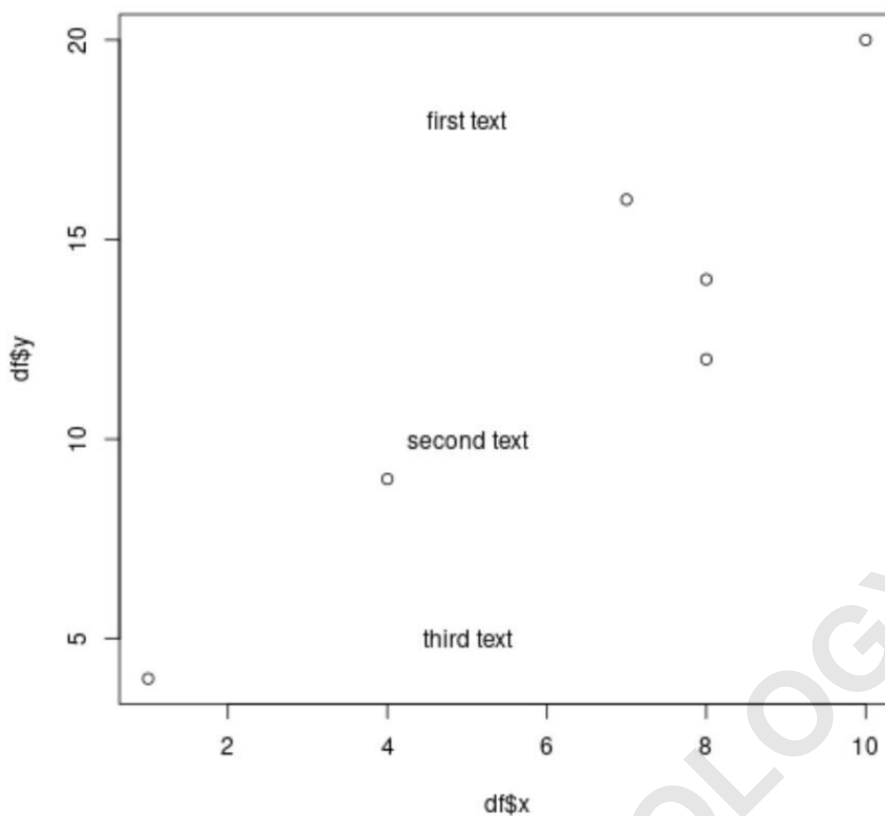
```
plot(df$x, df$y)
```

```
#add text elements
```

```
text(x=5, y=18, "first text")
```

```
text(x=5, y=10, "second text")
```

```
text(x=5, y=5, "third text")
```



Notice that three text elements have been added to the plot, each at the (x, y) coordinates that we specified.

Example 3: Customize Text Elements in Plot

#create data frame with values to plot

```
df <- data.frame(x=c(1, 4, 7, 8, 8, 10),  
y=c(4, 9, 16, 14, 12, 20))
```

#create scatterplot

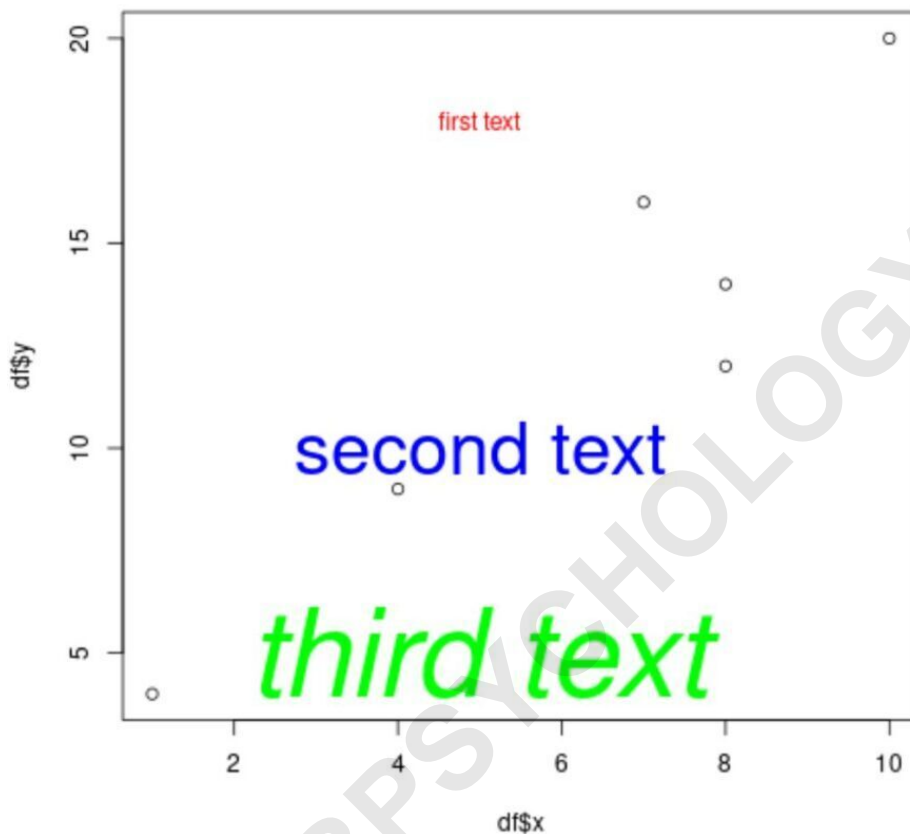
```
plot(df$x, df$y)
```

#add text elements with custom appearance

```
text(x=5, y=18, "first text", col='red')
```

```
text(x=5, y=10, "second text", col='blue', cex=3)
```

```
text(x=5, y=5, "third text", col='green', cex=5, font=3)
```



Notice that each of the three text elements have a custom appearance.

Also note that the font argument takes four possible values:

1: plain**2: bold****3: italic****4: bold-italic**

Since we specified `font=3` for our third text element, the font is italic.

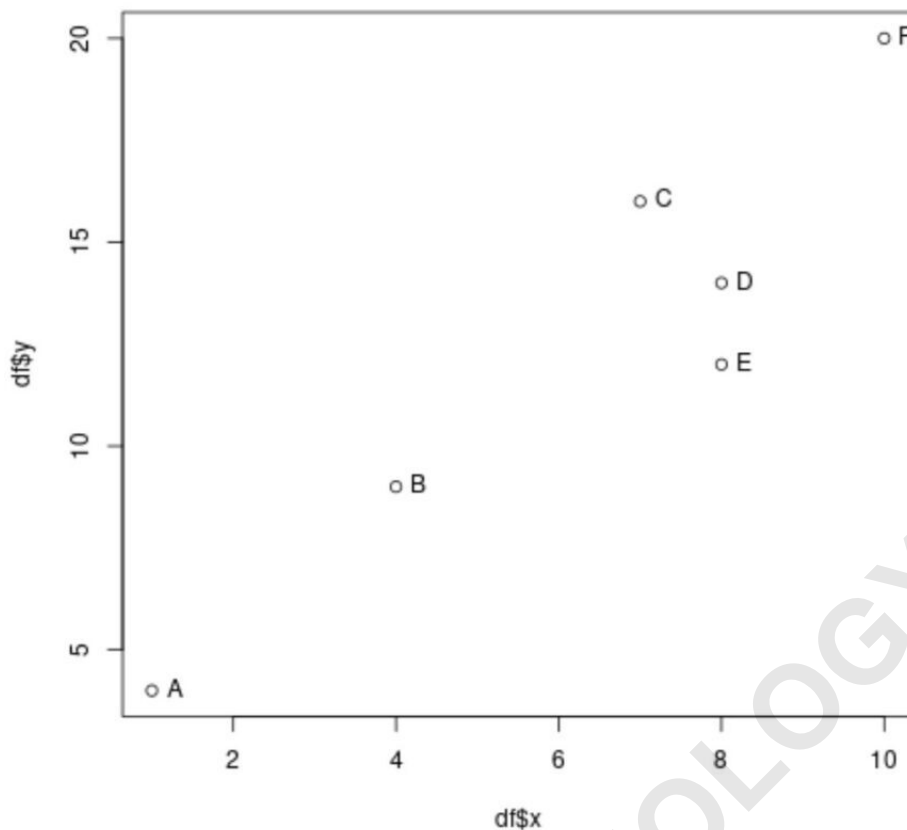
Example 4: Add Text Labels to Each Point in Plot

We can use the `labels` arguments to add a text label to each point in the plot:

```
#create data frame with values to plot
df <- data.frame(teams=c('A', 'B', 'C', 'D', 'E', 'F'),
x=c(1, 4, 7, 8, 8, 10),
y=c(4, 9, 16, 14, 12, 20))

#create scatterplot
plot(df$x, df$y)

#add text label to each point in plot
text(df$x, df$y, labels=df$teams, pos=4)
```



Notice that each of the points in the plot now have a text label.

Also note that the pos argument controls where the text label is placed relative to the point and takes four possible values:

**1: below text
2: left of text
3: above text
4: right of text**

Since we specified pos=4 each text label is placed to the right of the points in the plot.

Additional Resources

How to Use paste & paste0 Functions in R

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