

How can the legend position be changed in base R plots?

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The legend position in base R plots can be changed by using the "legend()" function and specifying the desired location through the "x" and "y" parameters. Alternatively, the "legend()" function can also accept the keyword "top", "bottom", "left", or "right" to automatically place the legend in the corresponding location. Additionally, the "horiz" parameter can be used to control the horizontal positioning of the legend, and the "ncol" parameter can be used to specify the number of columns in the legend. These options provide flexibility in adjusting the legend position to best suit the plot.

Change Legend Position in Base R Plots

There are two ways to change the legend position in base R plots:

Method 1: Use (x, y) coordinates

```
legend(4, 12, legend=c('y1', 'y2'), col=c('purple', 'red'),  
lty=1)
```

Method 2: Use keywords

```
legend('bottomright', legend=c('y1', 'y2'), col=c('purple',  
'red'), lty=1)
```

Using this method, you can specify the following locations:

"bottomright" "bottom" "bottomleft" "left" "topleft" "top"
"topright" "right" "center"

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

Example 1: Change Legend Position Using (x, y) Coordinates

The following code shows how to create a legend for a plot in base R and place it at x=4 and y=12:

```
#create data
```

```
x <- 1:10
```

```
y1<- c(3, 6, 8, 7, 8, 9, 13, 12, 10, 10)
```

```
y2 <- c(1, 3, 3, 4, 6, 7, 8, 10, 9, 9)
```

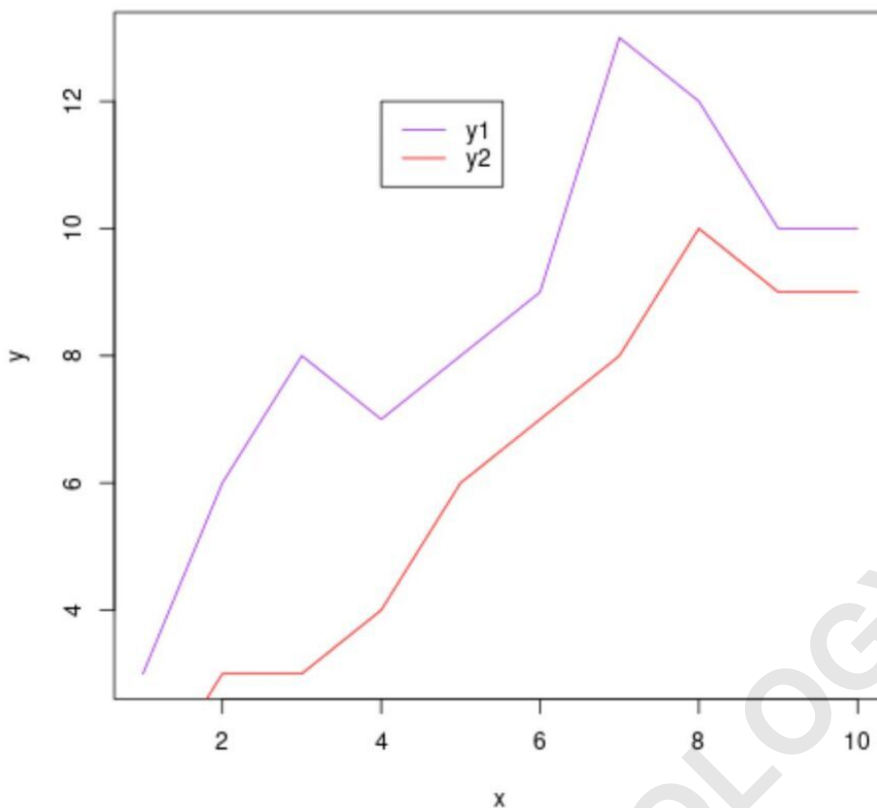
```
#create plot with multiple lines
```

```
plot(x, y1, col='purple', type='l', xlab='x', ylab='y')
```

```
lines(x, y2, col='red')
```

```
#add legend
```

```
legend(4, 12, legend=c('y1', 'y2'), col=c('purple', 'red'),  
lty=1)
```



Notice that the legend is placed at the exact (x,y) coordinates that we specified.

Example 2: Change Legend Position Using Keywords

The following code shows how to create a legend for a plot in base R and place it in the top left corner:

#create data

x <- 1:10

y1<- c(3, 6, 8, 7, 8, 9, 13, 12, 10, 10)

y2 <- c(1, 3, 3, 4, 6, 7, 8, 10, 9, 9)

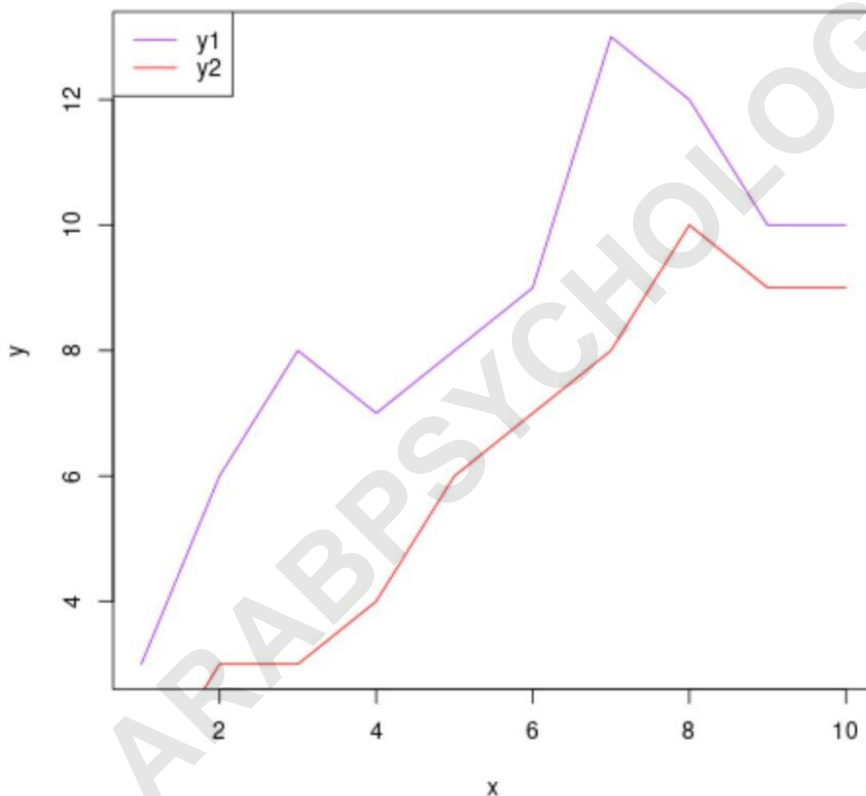
```
#create plot with multiple lines
```

```
plot(x, y1, col='purple', type='l', xlab='x', ylab='y')
```

```
lines(x, y2, col='red')
```

```
#add legend
```

```
legend('topleft', legend=c('y1', 'y2'), col=c('purple', 'red'),  
lty=1)
```



We can easily change it to a different location, such as the bottom right corner, by using a different keyword:

```
#create data
```

```
x <- 1:10
```

```
y1<- c(3, 6, 8, 7, 8, 9, 13, 12, 10, 10)
```

```
y2 <- c(1, 3, 3, 4, 6, 7, 8, 10, 9, 9)
```

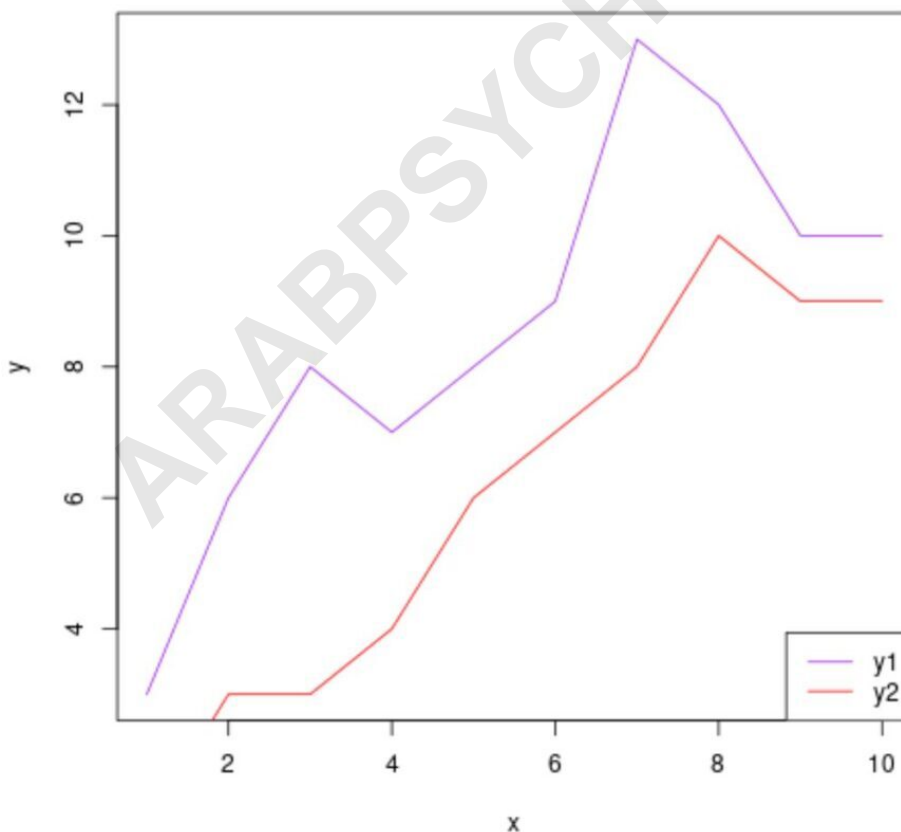
```
#create plot with multiple lines
```

```
plot(x, y1, col='purple', type='l', xlab='x', ylab='y')
```

```
lines(x, y2, col='red')
```

```
#add legend
```

```
legend('bottomright', legend=c('y1', 'y2'), col=c('purple',  
'red'), lty=1)
```



The legend is now placed in the bottom right corner of the plot.

Related:

Additional Resources

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

ARABPSYCHOLOGY.COM