

How can I create a table with the use of R, using an example?

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Creating a table using R is a straightforward process that allows for efficient organization and presentation of data. To create a table, one must first import the necessary data into R and then use the built-in functions to construct the table. An example of this would be using the "data.frame" function to create a table with columns and rows, and then filling in the corresponding values. This can be further customized by adding headers, labels, and formatting options to enhance the visual appeal of the table. Overall, using R to create a table provides a user-friendly and efficient way to display data in a structured and organized manner.

Plot a Table in R (With Example)

Often you may want to plot a table along with a chart in R.

Fortunately this is easy to do using functions from the gridExtra package.

The following example shows how to use functions from this package to plot a table in practice.

Example: Plot a Table in R

Suppose we have the following data frame in R:

```
#create data frame
```

```
df <- data.frame(x=c(1, 2, 3, 4, 5, 6, 7),
```

```
y=c(3, 4, 4, 8, 6, 10, 14))
```

```
#view data frame
```

```
df
```

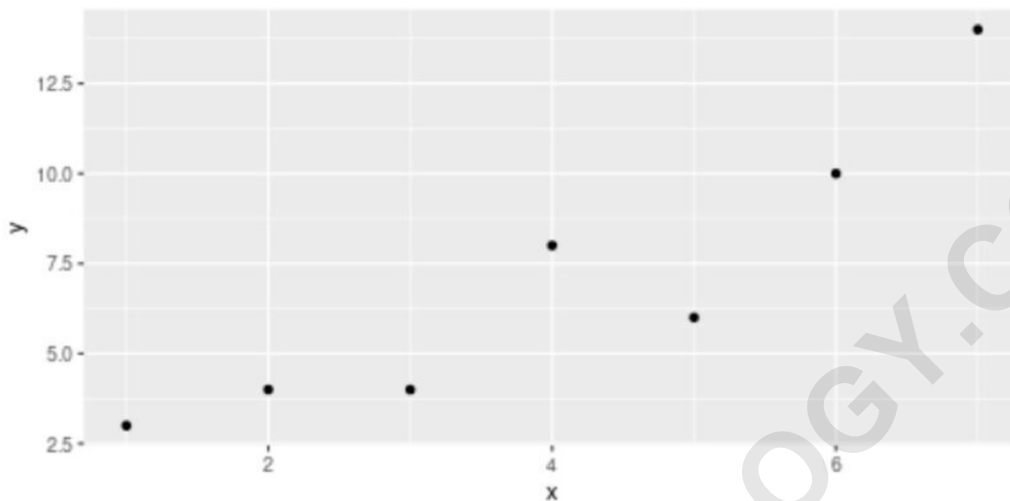
```
x y  
1 1 3  
2 2 4  
3 3 4  
4 4 8  
5 5 6  
6 6 10  
7 7 14
```

Now suppose we would like to create a scatterplot to visualize the values in the data frame and also plot a table that shows the raw values.

We can use the following syntax to do so:

```
library(gridExtra)  
library(ggplot2)  
  
#define scatterplot  
my_plot <- ggplot(df, aes(x=x, y=y)) +  
geom_point()  
  
#define table  
my_table <- tableGrob(df)
```

```
#create scatterplot and add table underneath it  
grid.arrange(my_plot, my_table)
```



| x | y |
|---|----|
| 1 | 3 |
| 2 | 4 |
| 3 | 4 |
| 4 | 8 |
| 5 | 6 |
| 6 | 10 |
| 7 | 14 |

Here is how this code worked:

We used `ggplot()` to generate the scatterplot
We used `tableGrob()` to convert the data frame to a table object
We used `grid.arrange()` to plot both the scatterplot and the table

By default, the `grid.arrange()` function arranges the scatterplot and the table in the same column.

However, you can use the `ncol` argument to display the scatterplot and table in two columns, i.e. side by side:

```
library(gridExtra)
```

```
library(ggplot2)
```

```
#define scatterplot
```

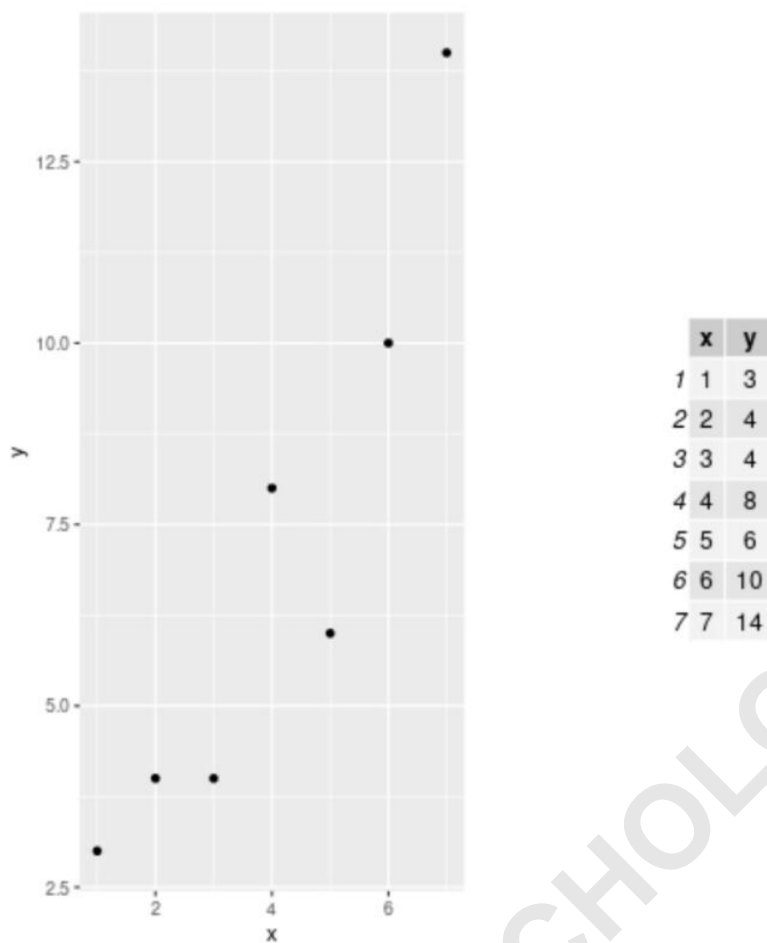
```
my_plot <- ggplot(df, aes(x=x, y=y)) +  
geom_point()
```

```
#define table
```

```
my_table <- tableGrob(df)
```

```
#create scatterplot and add table next to it
```

```
grid.arrange(arrangeGrob(my_plot, my_table, ncol=2))
```



The table is now shown to the side of the plot rather than underneath it.