

How can values be shown on a Seaborn barplot?

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A Seaborn barplot is a type of data visualization tool that displays values on a graph as rectangular bars. These values can be shown by specifying the data to be plotted, along with the desired x and y axis variables. The barplot will then automatically calculate and display the values on the y-axis, with each bar representing a specific value. Additionally, values can be further differentiated by using different colors or patterns for each data category, making it easier to compare and interpret the data. Overall, the Seaborn barplot is an effective way to visually represent values and their relationships in a concise and easy-to-understand manner.

Show Values on Seaborn Barplot (With Examples)

You can use the following function to display the values on a barplot:

```
def show_values(axs, orient="v", space=.01):
    def _single(ax):
        if orient == "v":
            for p in ax.patches:
                _x = p.get_x() + p.get_width() / 2
                _y = p.get_y() + p.get_height() + (p.get_height()*0.01)
                value = '{:.1f}'.format(p.get_height())
                ax.text(_x, _y, value, ha="center")
        elif orient == "h":
            for p in ax.patches:
                _x = p.get_x() + p.get_width() + float(space)
                _y = p.get_y() + p.get_height() - (p.get_height()*0.5)
                value = '{:.1f}'.format(p.get_width())
                ax.text(_x, _y, value, ha="left")
```

```

if isinstance(axs, np.ndarray):
    for idx, ax in np.ndenumerate(axs):
        _single(ax)
else:
    _single(axs)

```

This function works for both horizontal and vertical barplots.

The following examples show how to use this function in practice with the built-in seaborn "tips" dataset:

```

import seaborn as sns
import pandas as pd
import numpy as np

#load tips dataset
data = sns.load_dataset("tips")
#view first five rows
data.head()

```

```

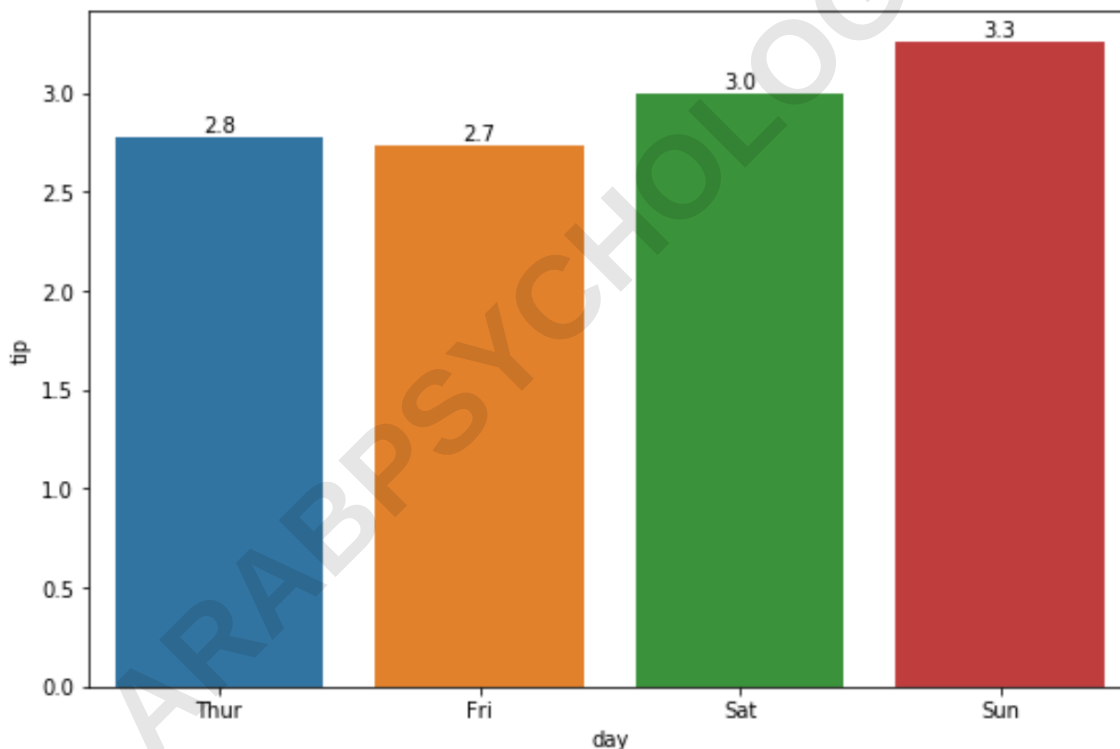
total_bill  tip  sex  smoker  day  time  size
0  16.99  1.01  Female  No  Sun  Dinner  2
1  10.34  1.66  Male  No  Sun  Dinner  3
2  21.01  3.50  Male  No  Sun  Dinner  3
3  23.68  3.31  Male  No  Sun  Dinner  2
4  24.59  3.61  Female  No  Sun  Dinner  4

```

Example 1: Show Values on Vertical Barplot

The following code shows how to display the values on a vertical barplot:

```
#create vertical barplot  
p = sns.barplot(x="day", y="tip", data=data, ci=None)  
  
#show values on barplot  
show_values(p)
```



Example 2: Show Values on Horizontal Barplot

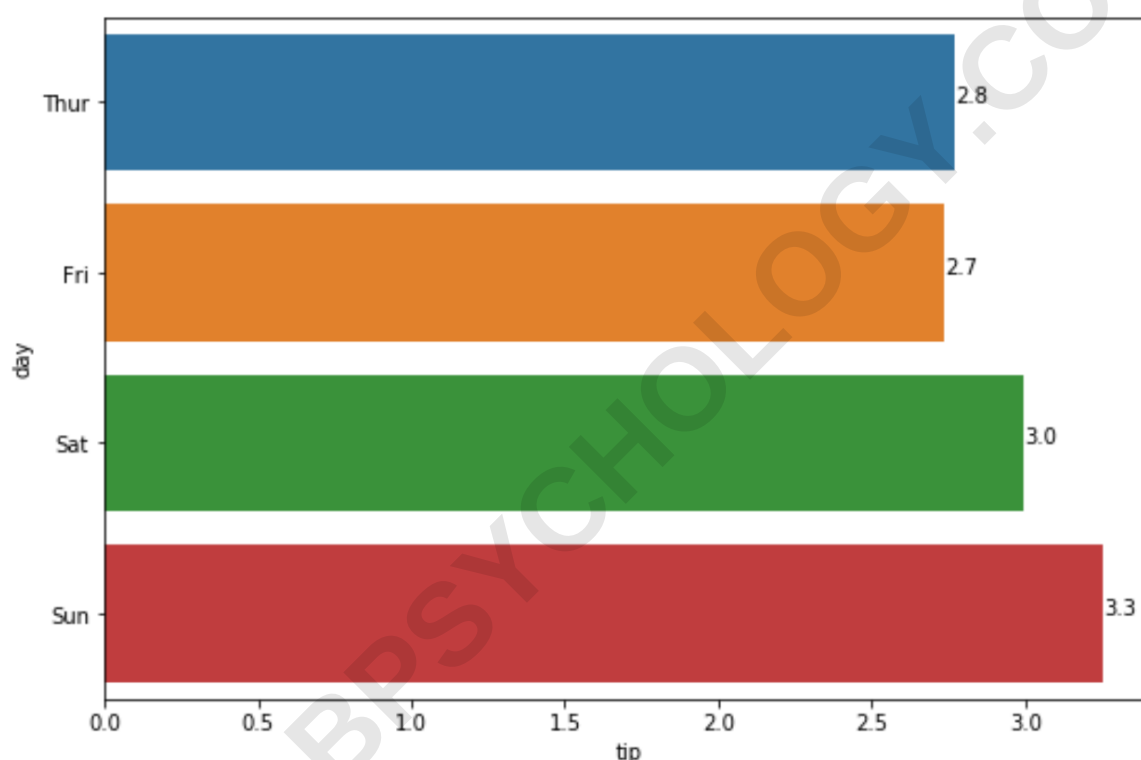
The following code shows how to display the values on a horizontal barplot:

```
#create horizontal barplot
```

```
p = sns.barplot(x="tip", y="day", data=data, ci=None)
```

```
#show values on barplot
```

```
show_values(p, "h", space=0)
```



Note that the larger the value you use for space, the further away the labels will be from the bars.

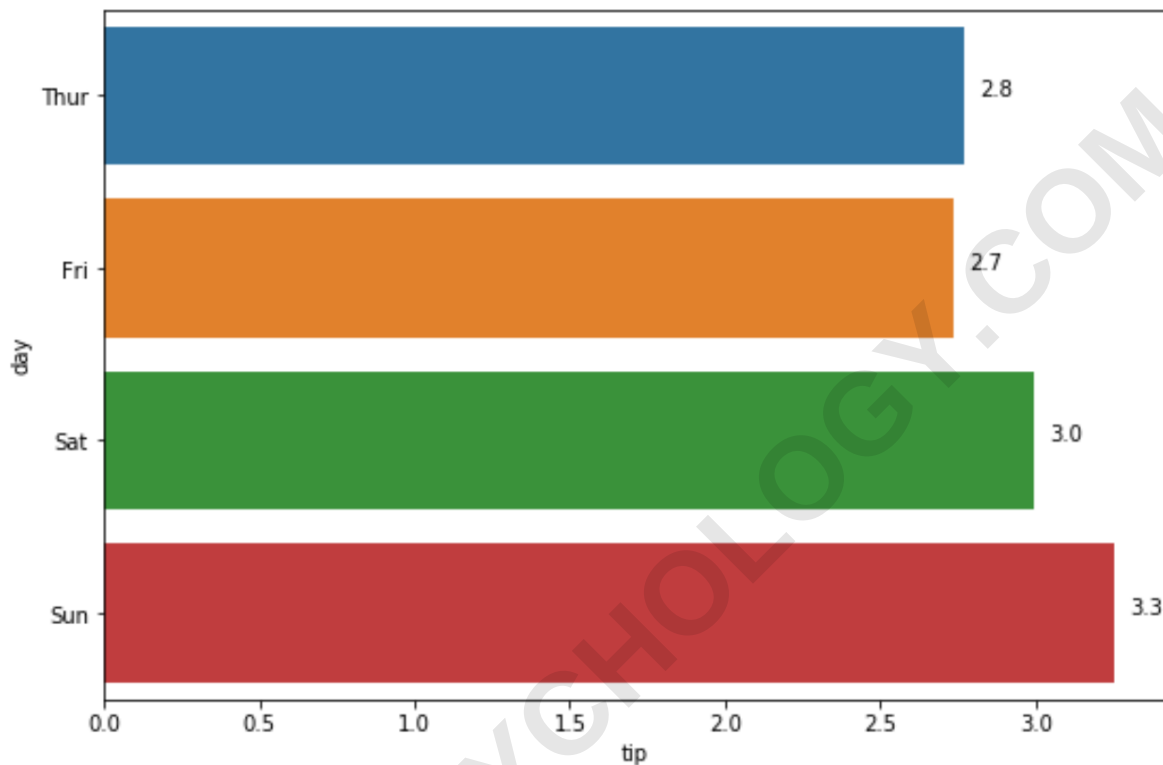
For example, let's change the space from 0 to .05:

```
#create horizontal barplot
```

```
p = sns.barplot(x="tip", y="day", data=data, ci=None)
```

#show values on barplot

show_values(p, "h", space=0.05)



value = '{:.1f}'.format(p.get_height())

For example, change it from .1f to .2f to show two decimal places instead of one.

The following tutorials explain how to perform other common functions in seaborn: