

# How to create subplots in Seaborn with examples?

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## RECOMMENDED CITATION

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Subplots in Seaborn are a useful tool for visualizing multiple plots in a single figure. They allow for easy comparison and analysis of data. To create subplots in Seaborn, one must first import the necessary libraries and data. Then, the subplots can be created using the "plt.subplots" function, specifying the number of rows and columns desired. Each subplot can then be customized and plotted using the corresponding axes object. Examples of creating subplots in Seaborn can include plotting different types of charts such as scatter plots, bar charts, and line plots in a single figure, or creating multiple plots with different subsets of data for comparison. Overall, subplots in Seaborn are a powerful tool for effectively communicating and analyzing data.

## Create Subplots in Seaborn (With Examples)

You can use the following basic syntax to create subplots in the data visualization library in Python:

```
#define dimensions of subplots (rows, columns)  
fig, axes = plt.subplots(2, 2)  
  
#create chart in each subplot  
sns.boxplot(data=df, x='team', y='points', ax=axes)  
sns.boxplot(data=df, x='team', y='assists', ax=axes)  
  
...
```

The following example shows how to use this syntax in practice.

**Example: Creating Subplots in Seaborn**

**Suppose we have the following pandas DataFrame:**

```
import pandas as pd

#create DataFrame
df = pd.DataFrame({'team': ,
'points': ,
'assists': ,
'rebounds': ,
'blocks': })

#view DataFrame
print(df)

team points assists rebounds blocks
0 A 19 13 11 1
1 A 12 15 7 2
2 A 15 11 8 2
3 A 14 8 12 3
4 B 19 6 13 5
5 B 23 8 7 4
6 B 25 11 6 3
7 B 29 14 8 3
```

The following code shows how to define a plotting region with two rows and two columns and create a boxplot in each subplot for each of the four numeric

## variables in the DataFrame:

```
import matplotlib.pyplot as plt
```

```
import seaborn as sns
```

```
#set seaborn plotting aesthetics as defaultsns.set()
```

```
#define plotting region (2 rows, 2 columns)
```

```
fig, axes = plt.subplots(2, 2)
```

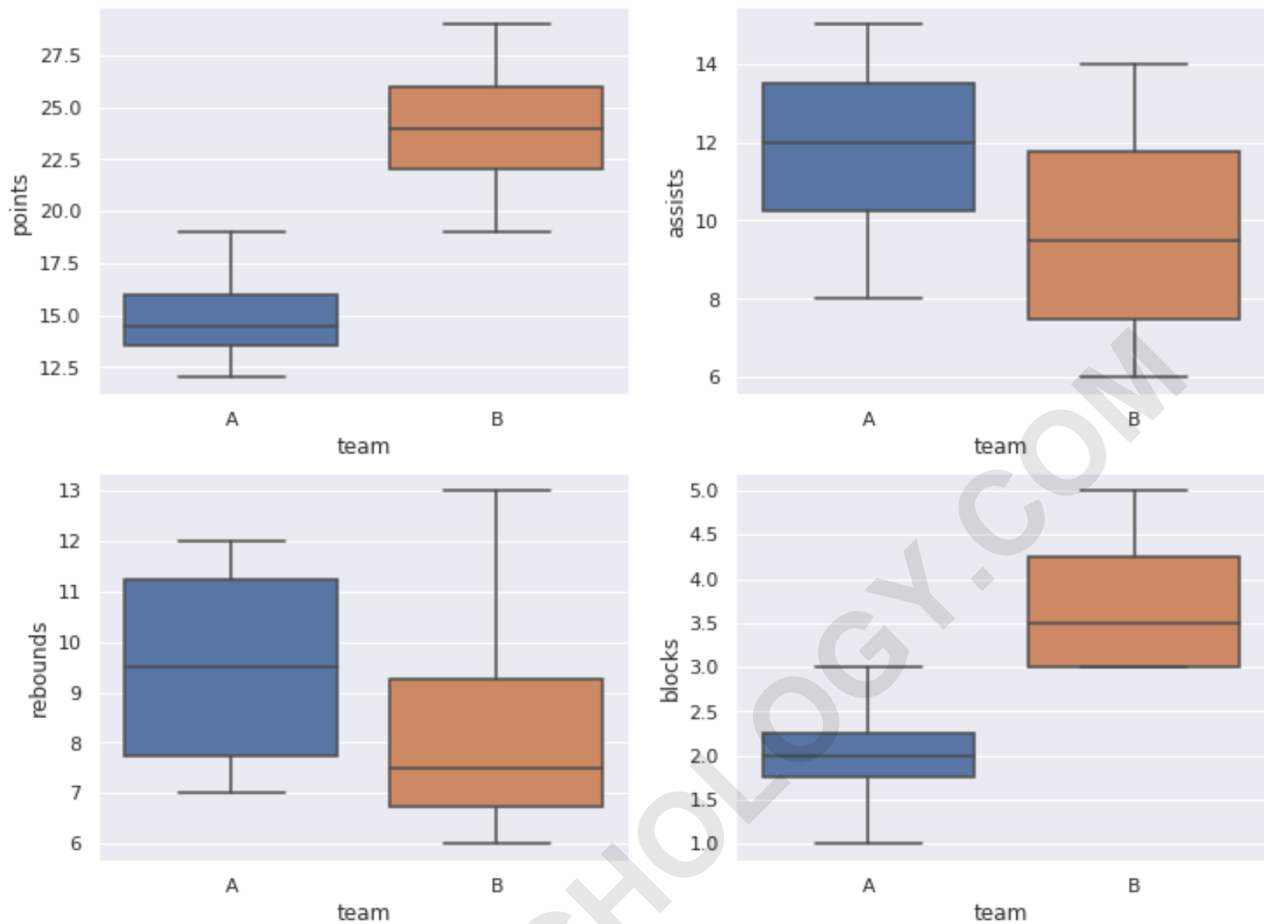
```
#create boxplot in each subplot
```

```
sns.boxplot(data=df, x='team', y='points', ax=axes)
```

```
sns.boxplot(data=df, x='team', y='assists', ax=axes)
```

```
sns.boxplot(data=df, x='team', y='rebounds', ax=axes)
```

```
sns.boxplot(data=df, x='team', y='blocks', ax=axes)
```



In this example, we created a plotting region with two rows and two columns and filled each subplot with boxplots.

However, we can use similar syntax to create a plotting region with different dimensions and fill in the subplots with different charts.

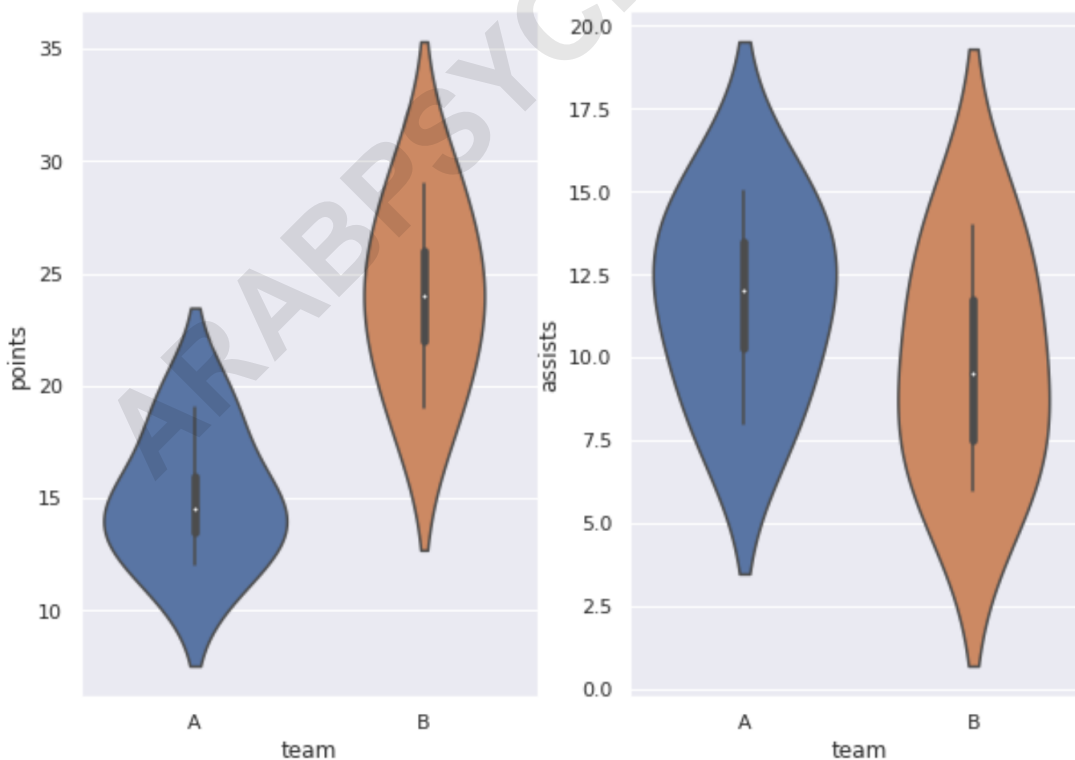
For example, the following code shows how to create a plotting region with one row and two columns and fill in each plot with a violin plot:

```
import matplotlib.pyplot as plt
import seaborn as sns

#set seaborn plotting aesthetics as default
sns.set()

#define plotting region (1 row, 2 columns)
fig, axes = plt.subplots(1, 2)

#create boxplot in each subplot
sns.violinplot(data=df, x='team', y='points', ax=axes)
sns.violinplot(data=df, x='team', y='assists', ax=axes)
```



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

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