

How can the hue parameter be used in pairplot in Seaborn?

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The hue parameter in the pairplot function in Seaborn is used to add an additional dimension to the plot, by allowing the data to be colored based on a categorical variable. This allows for easier comparison and visualization of relationships between multiple variables. The hue parameter can be specified as a column name in the dataset, and the resulting plot will display each unique value of that column with a different color. This feature is particularly useful for identifying patterns and trends within different groups of data.

Seaborn: Use hue Parameter in Pairplot

You can use the hue parameter when creating pairplots in seaborn to color plot aspects based on the values of a specific variable.

You can use the following basic syntax:

```
import seaborn as sns
```

```
sns.pairplot(data=df, hue='team')
```

This particular example creates a pairplot using every numerical variable in the data frame and colors the plot aspects based on the value of the team variable.

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

Example: Using hue Parameter in Seaborn Pairplot

Suppose we have the following pandas DataFrame that

shows the points and assists by basketball players on two different teams:

```
import pandas as pd
```

```
#create DataFrame
```

```
df = pd.DataFrame({'team': ,  
'assists': ,  
'points': })
```

```
#view DataFrame
```

```
print(df)
```

```
team assists points
```

```
0 A 3 5
```

```
1 A 4 6
```

```
2 A 4 9
```

```
3 A 7 12
```

```
4 A 9 15
```

```
5 B 6 5
```

```
6 B 7 10
```

```
7 B 8 13
```

```
8 B 10 13
```

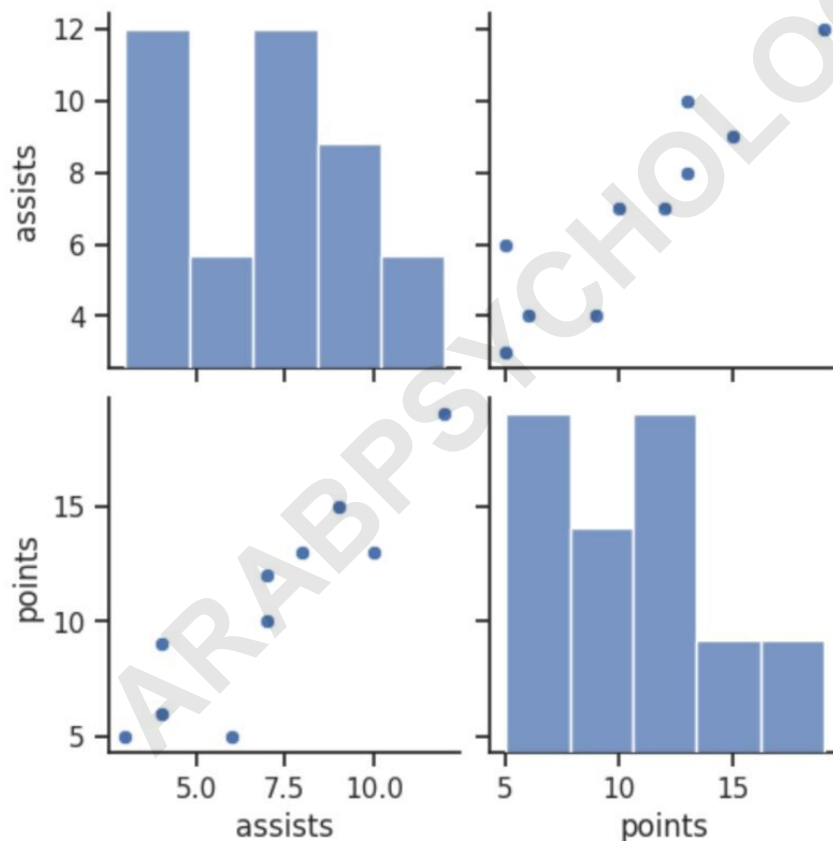
```
9 B 12 19
```

If we use the `pairplot()` function, then seaborn will create a pairplot using the two numerical variables in the DataFrame:

```
import seaborn as sns
```

```
#create pairplot
```

```
sns.pairplot(data=df)
```

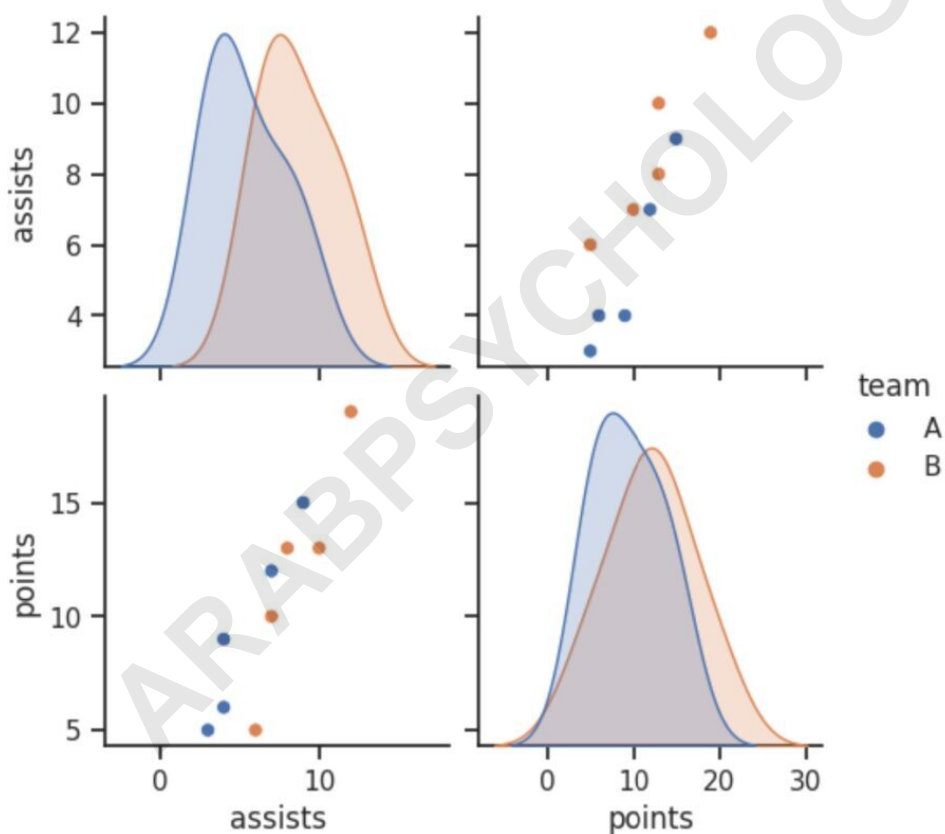


The resulting pairplot displays scatterplots and histograms using the points and assists variables.

If we use the hue parameter within the pairplot() function, we can color the aspects of the plot based on the values of the team variable:

```
import seaborn as sns
```

```
#create pairplot using values of team variable as colors  
sns.pairplot(data=df, hue='team')
```



By using the hue parameter, we're able to make the following changes in the plot:

The points in the scatterplot are colored based on the team value. Overlapping density curves are used to visualize the distribution of values for each unique team.

Note: You can find the complete documentation for the `seaborn pairplot()` function .

The following tutorials explain how to perform other common tasks using seaborn:

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