

How can I create a bar plot from a groupby object in Pandas?

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Creating a bar plot from a groupby object in Pandas involves first grouping a dataset based on a specific variable using the groupby function. This produces a groupby object that contains the grouped data. Then, using the plot function and specifying the desired plot type as a bar chart, the grouped data can be visualized in the form of a bar plot. This allows for easy comparison and analysis of the data within each group. Additionally, the plot can be customized with labels, titles, and other formatting options to enhance the clarity and understanding of the data. Overall, using a groupby object to create a bar plot in Pandas is an efficient and effective way to visualize and analyze data in a structured manner.

Pandas: Create Bar Plot from GroupBy

You can use the following syntax to create a bar plot from a GroupBy function in pandas:

```
#calculate sum of values by group
```

```
df_groups = df.groupby().sum()
```

```
#create bar plot by group
```

```
df_groups.plot(kind='bar')
```

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

Example: Create Bar Plot from GroupBy in Pandas

Suppose we have the following pandas DataFrame that shows the points scored by basketball players on various teams:

```
import pandas as pd

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

#view first five rows of DataFrame
df.head()
```

```
team points
0 A 12
1 A 29
2 A 34
3 A 14
4 A 10
```

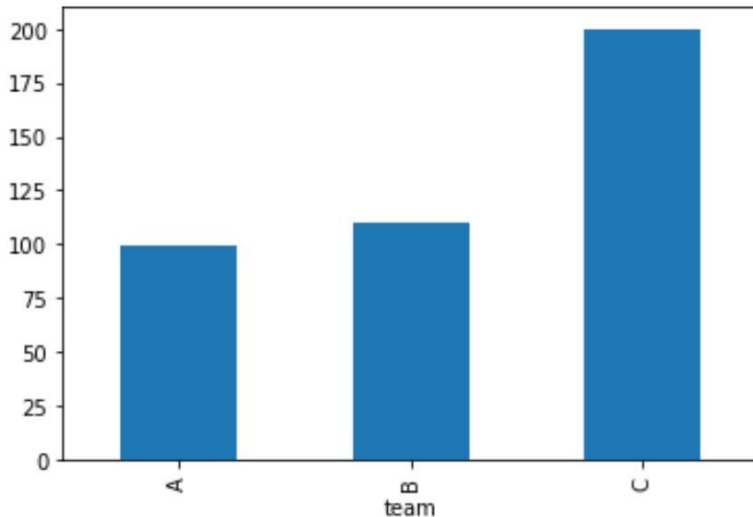
We can use the following syntax to calculate the sum of points scored by each team and create a bar plot to visualize the sum for each team:

```
import matplotlib.pyplot as plt

#calculate sum of points for each team
df.groupby('team').sum()

#create bar plot by group
```

`df_groups.plot(kind='bar')`



The x-axis shows the name of each team and the y-axis shows the sum of the points scored by each team.

We can also use the following code to make the plot look a bit better:

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

```
#calculate sum of points for each team
```

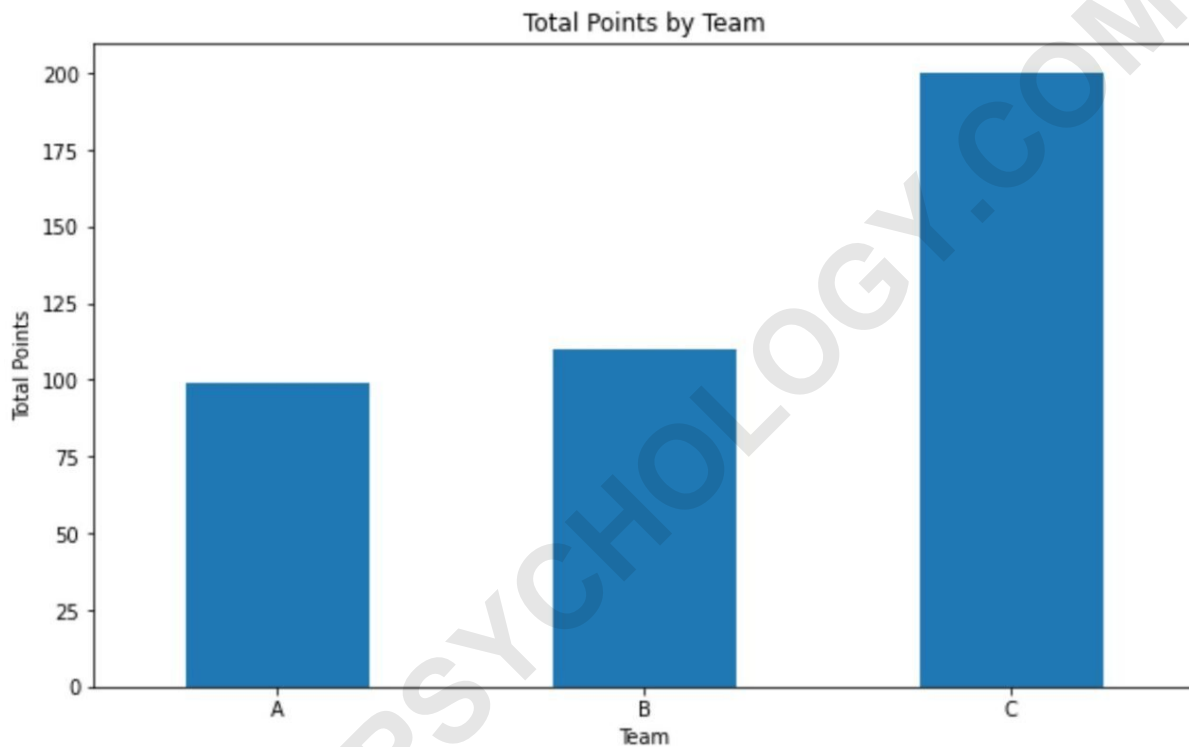
```
df_groups = df.groupby().sum()
```

```
#create bar plot with custom  
aestheticsdf_groups.plot(kind='bar', title='Total Points  
by Team',
```

```
ylabel='Total Points', xlabel='Team', figsize=(10, 6))
```

```
#rotate x-axis ticks vertically
```

```
plt.xticks(rotation=0)
```



Note: You can find the complete documentation for the **GroupBy** function .

Additional Resources

The following tutorials explain how to perform other common operations in pandas: