How can I create a histogram from a Pandas DataFrame?

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A histogram is a graphical representation of the distribution of numerical data. It is a useful tool for visualizing the spread and shape of data. With the help of Pandas DataFrame, it is possible to easily create a histogram using the built-in functions and methods. To create a histogram from a Pandas DataFrame, first, the data needs to be organized in a column format. Then, using the "plot" function, the data can be plotted as a histogram with the desired number of bins. Additional parameters such as labels, titles, and colors can also be added to customize the histogram. This simple process allows for efficient and accurate visualization of data distribution, making it a valuable tool for data analysis.

Create a Histogram from Pandas DataFrame

You can use the following basic syntax to create a histogram from a pandas DataFrame:

df.hist(column='col_name')

The following examples show how to use this syntax in practice.

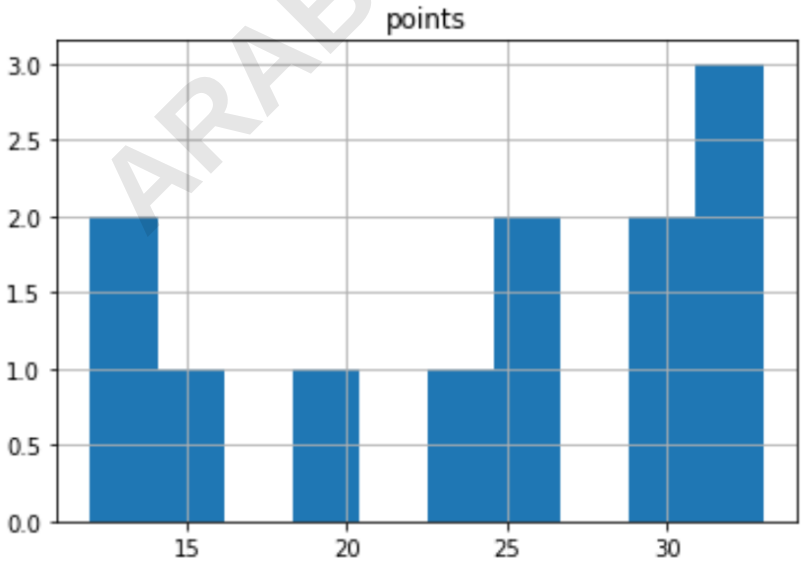
Example 1: Plot a Single Histogram

The following code shows how to create a single histogram for a particular column in a pandas DataFrame:

import pandas as pd

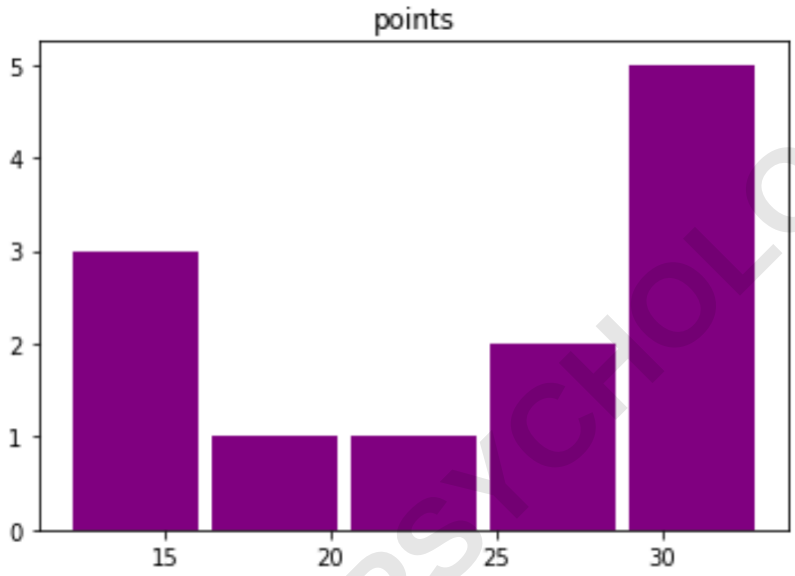
#create DataFrame
df = pd.DataFrame({'points': ,

```
'assists': ,
'rebounds': })

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

points assists rebounds
0 25 5 11
1 12 7 8
2 15 7 10
3 14 9 6
4 19 12 6

#create histogram for 'points' column
df.hist(column='points')
```



We can also customize the histogram with specific colors, styles, labels, and number of bins:

#create custom histogram for 'points' column
df.hist(column='points', bins=5, grid=False, rwidth=.9, color='purple')

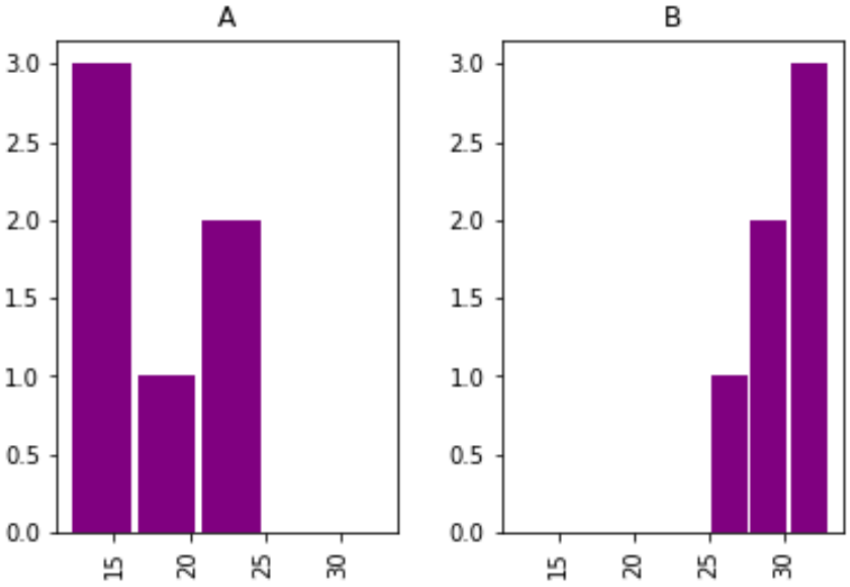


The x-axis displays the points scored per player and the y-axis shows the frequency for the number of players who scored that many points.

Example 2: Plot Multiple Histograms

The following code shows how to plot multiple histograms from a pandas DataFrame:

```
import pandas as pd

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

#view first five rows
df.head()

team points
0 A 25
1 A 12
2 A 15
3 A 14
4 A 19

#create histogram for each team
df.hist(column='points', by='team', bins=3, grid=False,
rwidth=.9,
color='purple', sharex=True)
```



Note that the sharex argument specifies that the two histograms should share the same x-axis.

This makes it easier to compare the distribution of values between the two histograms.

The following tutorials explain how to create other common plots in Python: