

# How can I plot two columns from a Pandas DataFrame?

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## RECOMMENDED CITATION

stats writer (2024). *How can I plot two columns from a Pandas DataFrame?*.

PSYCHOLOGICAL SCALES. Retrieved from <https://scales.arabpsychology.com/?p=153423>

The process of plotting two columns from a Pandas DataFrame involves selecting the desired columns and using the appropriate function or method to create a visual representation of the data. This can be achieved by using the built-in plotting functions provided by Pandas, or by utilizing external libraries such as Matplotlib or Seaborn. By specifying the two columns of interest, a plot can be generated to showcase the relationship between the variables, allowing for a better understanding and analysis of the data.

## Plot Two Columns from Pandas DataFrame

There are two common ways to plot the values from two columns in a pandas DataFrame:

### Method 1: Plot Two Columns as Points on Scatter Plot

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

```
plt.scatter(df, df)
```

### Method 2: Plot Two Columns as Lines on Line Chart

```
df.plot(x='column1', y=)
```

The following examples show how to use each method in practice.

#### Example 1: Plot Two Columns on Scatter Plot

Suppose we have the following pandas DataFrame that

**contains information about various basketball players:**

```
import pandas as pd
```

```
#create DataFrame
```

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

```
#view DataFrame
```

```
print(df)
```

```
team points assists
```

```
0 A 18 5
```

```
1 B 22 7
```

```
2 C 19 7
```

```
3 D 14 9
```

```
4 E 14 12
```

```
5 F 11 9
```

```
6 G 20 9
```

```
7 H 28 4
```

**We can use the following code to create a scatter plot that displays the points column on the x-axis and the assists column on the y-axis:**

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

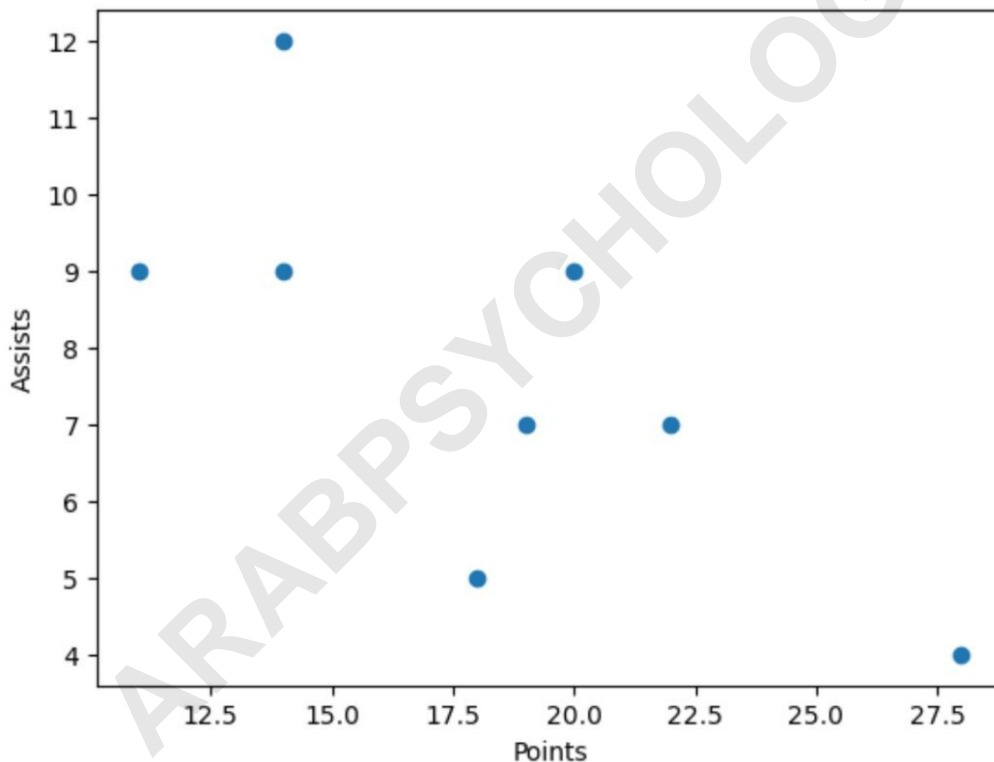
```
#create scatter plot
```

```
plt.scatter(df, df)
```

```
#add axis labels
```

```
plt.xlabel('Points')
```

```
plt.ylabel('Assists')
```



The x-axis contains the values from the points column and the y-axis contains the values from the assists column.

## Example 2: Plot Two Columns on Line Chart

Suppose we have the following pandas DataFrame that contains information about points scored and points allowed by a basketball team in six different games:

```
import pandas as pd

#create DataFrame
df = pd.DataFrame({'game': ,
'points_for': ,
'points_against': })

#view DataFrame
print(df)

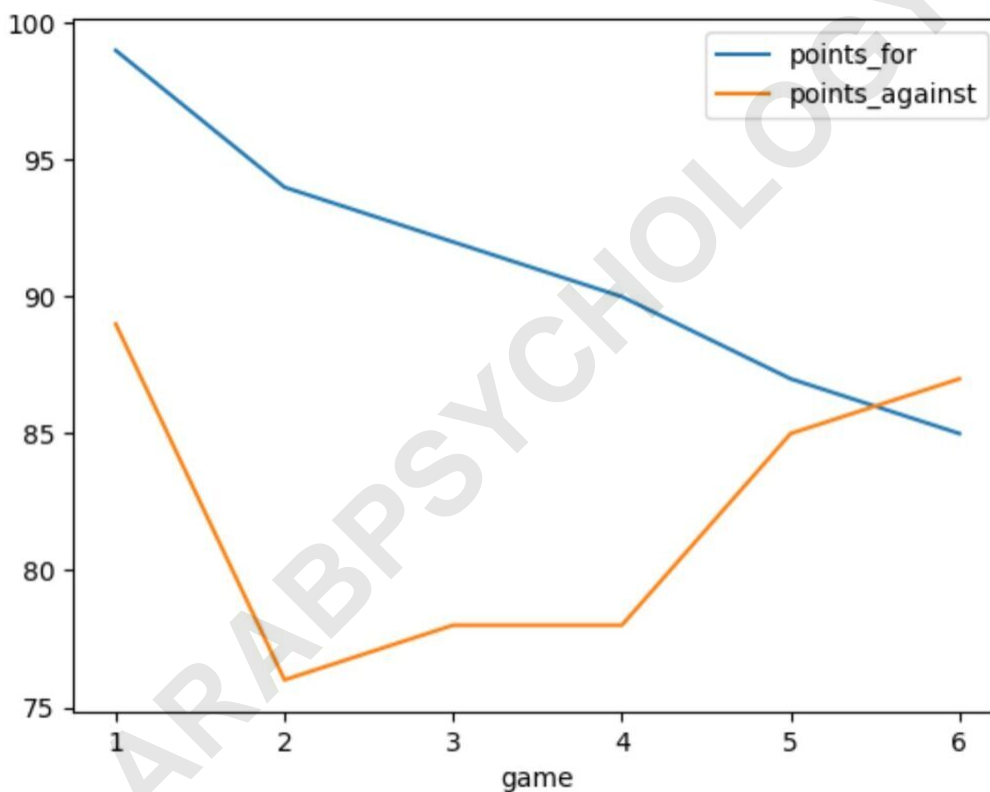
game points_for points_against
0 1 99 89
1 2 94 76
2 3 92 78
3 4 90 78
4 5 87 85
5 6 85 87
```

We can use the following code to create a line chart that

displays the values for `point_for` on one line and `points_against` on another line while using the value for `game` on the x-axis:

```
#plot points_for and points_against columns on same y-axis
```

```
df.plot(x='game', y=)
```



The blue line represents the value for the `points_for` column in each game and the orange line represents the values for the `points_against` column in each game.

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

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