

How can I plot a Pandas Series in Python?

Authored by
stats writer

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The process of plotting a Pandas Series in Python involves using the built-in plotting functions of the Pandas library. This allows for visualization of data in a graphical form, making it easier to understand and analyze. The Pandas Series object, which is a one-dimensional labeled array, can be plotted using various charts such as line, bar, scatter, and histogram. The steps involved include importing the necessary libraries, creating a Pandas Series, and calling the appropriate plot function with desired parameters. This enables users to effectively convey insights and trends from their data through visual representations.

Plot a Pandas Series (With Examples)

There are two common ways to plot the values in a pandas Series:

Method 1: Create Line Plot from pandas Series

```
import pandas as pd
import matplotlib.pyplot as plt

plt.plot(my_series.index, my_series.values)
```

Method 2: Create Histogram from pandas Series

```
import pandas as pd
import matplotlib.pyplot as plt

my_series.plot(kind='hist')
```

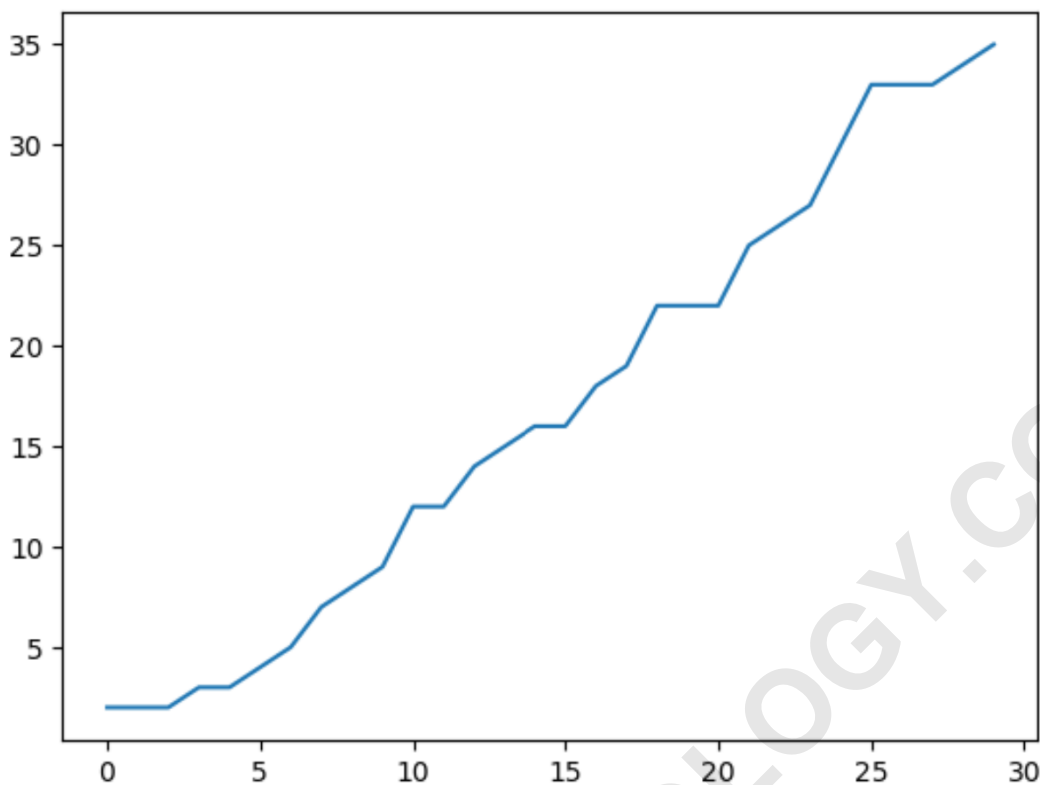
The following examples show how to use each method

in practice.

Example 1: Create Line Plot from pandas Series

The following code shows how to create a line plot from a pandas Series:

```
import pandas as pd  
import matplotlib.pyplot as plt  
  
#create pandas Series  
my_series = pd.Series()  
  
#create line plot to visualize values in Series  
plt.plot(my_series.index, my_series.values)
```



The x-axis shows the index values of the pandas Series and the y-axis shows the actual values in the Series.

You can also use various functions from pandas and matplotlib to customize the appearance of the line as well as the axis labels and title of the plot:

```
#create customized line plot
```

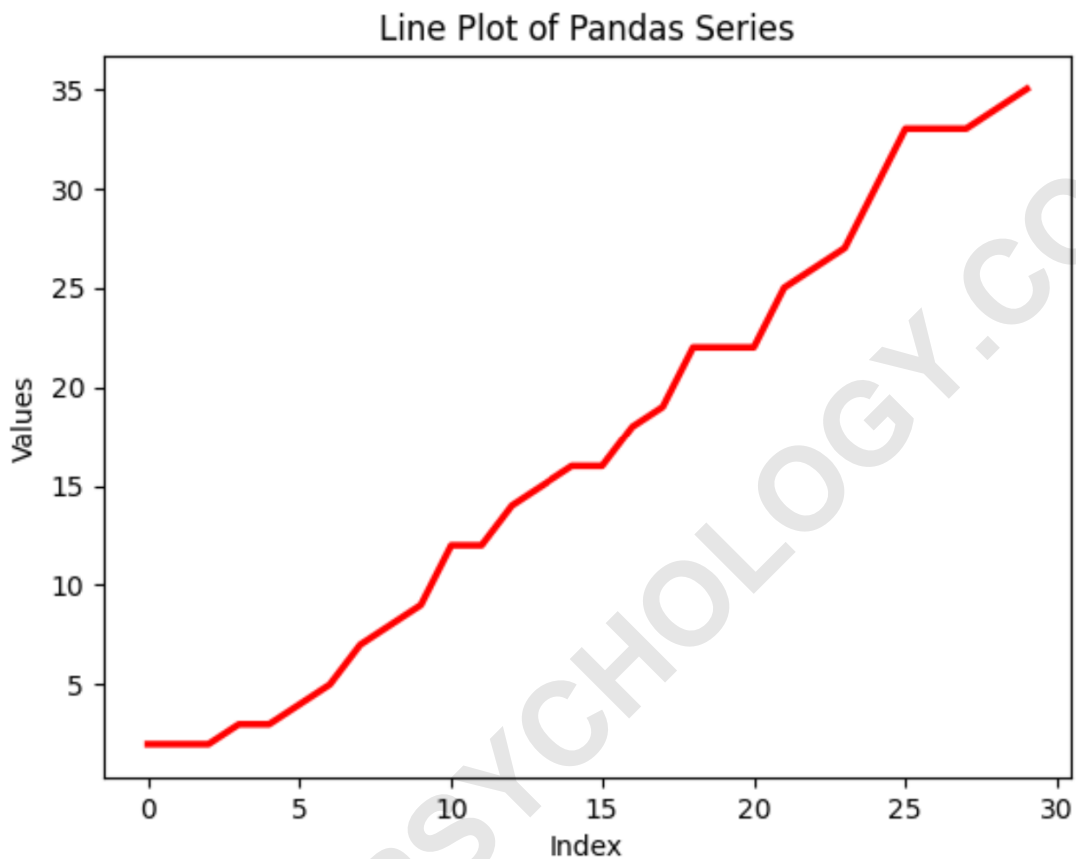
```
plt.plot(my_series.index, my_series.values, color='red',  
linewidth=2.5)
```

```
#add axis labels and title
```

```
plt.xlabel('Index')
```

```
plt.ylabel('Values')
```

```
plt.title('Line Plot of Pandas Series')
```



Example 2: Create Histogram from pandas Series

The following code shows how to create a histogram from a pandas Series:

```
import pandas as pd
```

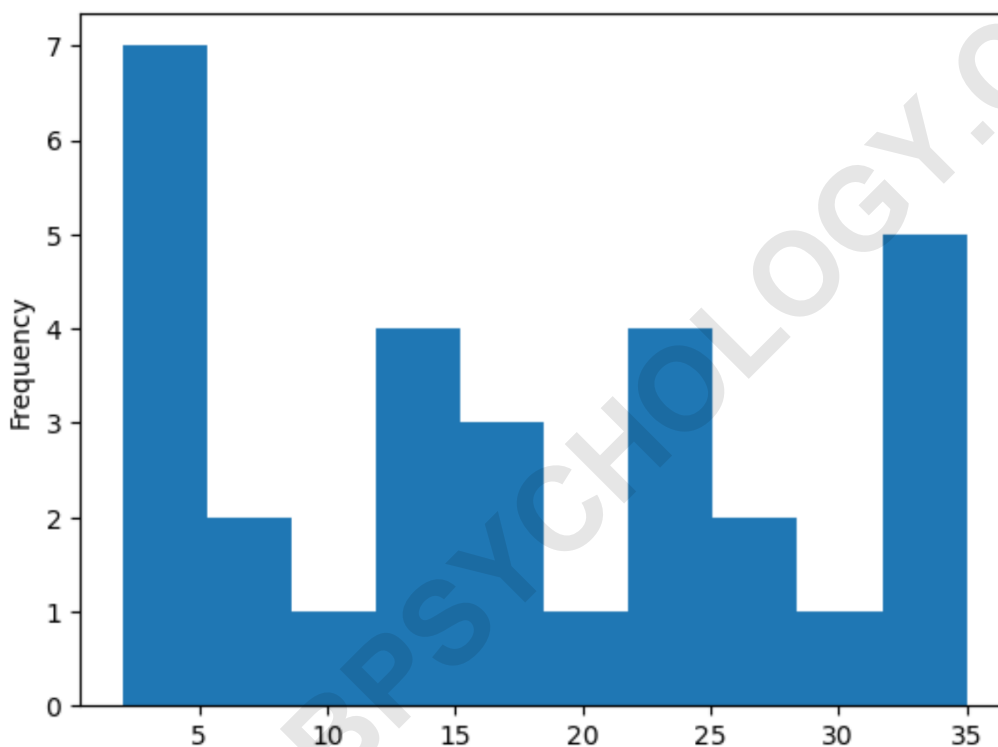
```
import matplotlib.pyplot as plt
```

```
#create pandas Series
```

```
my_series = pd.Series()
```

```
#create histogram visualize distribution of values in Series
```

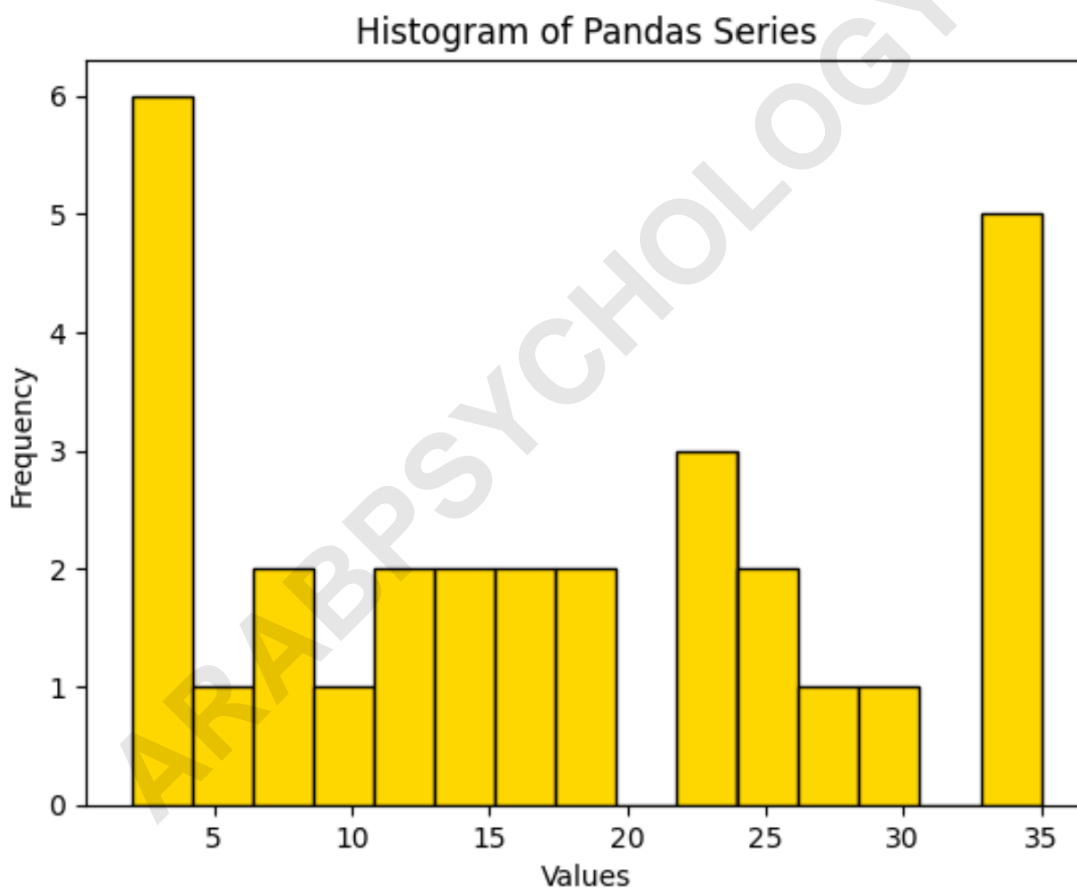
```
my_series.plot(kind='hist')
```



The x-axis shows the values of the pandas Series and the y-axis shows the frequency of the values.

You can also use various functions from pandas and matplotlib to customize the appearance of the histogram as well as the number of bins used in the histogram:

```
#create histogram with 15 bins  
my_series.plot(kind='hist',          edgecolor='black',  
color='gold', bins=15)  
  
#add axis labels and title  
plt.xlabel('Values')  
plt.title('Histogram of Pandas Series')
```



Note that the default number of bins used in a histogram is 10.

Feel free to use the bins argument to increase this number to produce more bins or reduce this number to produce fewer bins.

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

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