

# How can I plot the value counts in Pandas and provide an example?

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## RECOMMENDED CITATION

stats writer (2024). *How can I plot the value counts in Pandas and provide an example?*. PSYCHOLOGICAL SCALES. Retrieved from <https://scales.arabpsychology.com/?p=152977>

Plotting value counts in Pandas refers to visualizing the frequency of unique values in a particular column or series. This can be done using the built-in `value_counts()` function in Pandas, which calculates the number of occurrences of each unique value and returns the results in descending order. To plot these values, we can use the `plot()` function and specify the type of plot we want, such as bar or pie chart. For example, if we have a dataframe with a column named "gender" containing values like "male" and "female", we can use `value_counts()` to calculate the frequency and then plot a bar chart to visually represent the results. This allows for a quick and easy way to analyze and understand the distribution of data in a column or series.

## Pandas: Plot Value Counts (With Example)

**You can use the `value_counts()` function in pandas to count the occurrences of values in a given column of a DataFrame.**

**You can use one of the following methods to plot the values produced by the `value_counts()` function:**

### Method 1: Plot Value Counts in Descending Order

```
df.my_column.value_counts().plot(kind='bar')
```

### Method 2: Plot Value Counts in Ascending Order

```
df.my_column.value_counts().sort_values().plot(kind='bar')
```

### Method 3: Plot Value Counts in Order They Appear in

## DataFrame

```
df.my_column.value_counts().plot(kind='bar')
```

The following examples show how to use each method in practice with the following pandas DataFrame:

```
import pandas as pd
```

```
#create DataFrame
```

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

```
#view DataFrame
```

```
print(df)
```

```
team points
```

```
0 A 15
```

```
1 A 12
```

```
2 B 18
```

```
3 B 20
```

```
4 B 22
```

```
5 B 28
```

```
6 B 35
```

```
7 C 40
```

```
#calculate occurrences of each value in 'team' column  
df.team.value_counts()
```

**B 5**

**A 2**

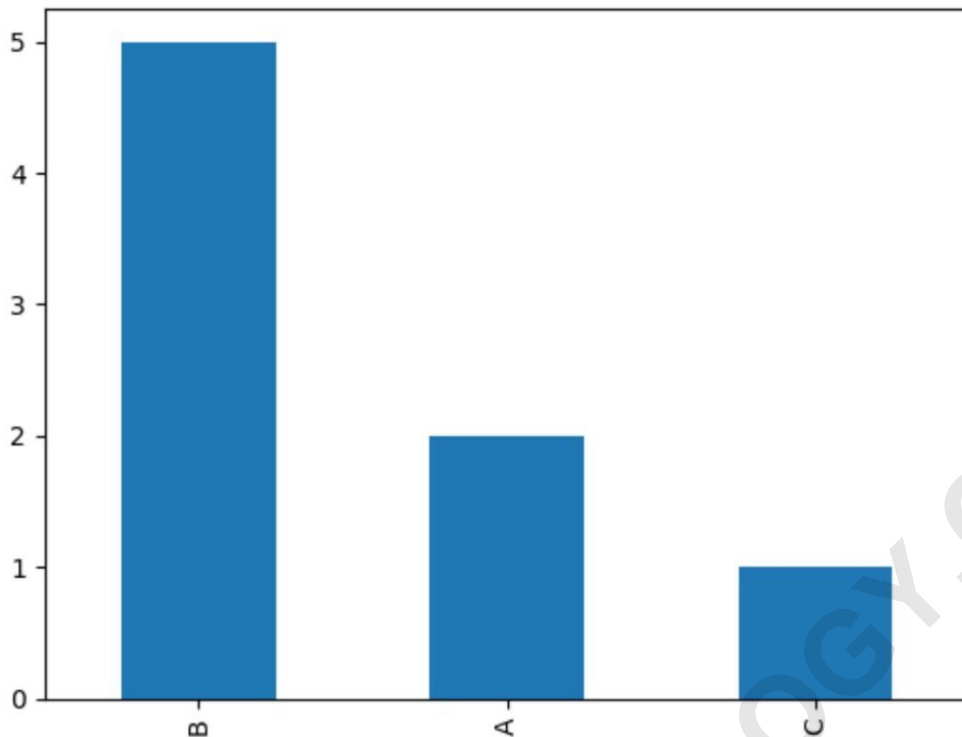
**C 1**

**Name: team, dtype: int64**

**Example 1: Plot Value Counts in Descending Order**

**The following code shows how to plot the value counts in a bar chart in descending order:**

```
#plot value counts of team in descending order  
df.team.value_counts().plot(kind='bar')
```



The x-axis displays the team name and the y-axis displays the frequency of each team.

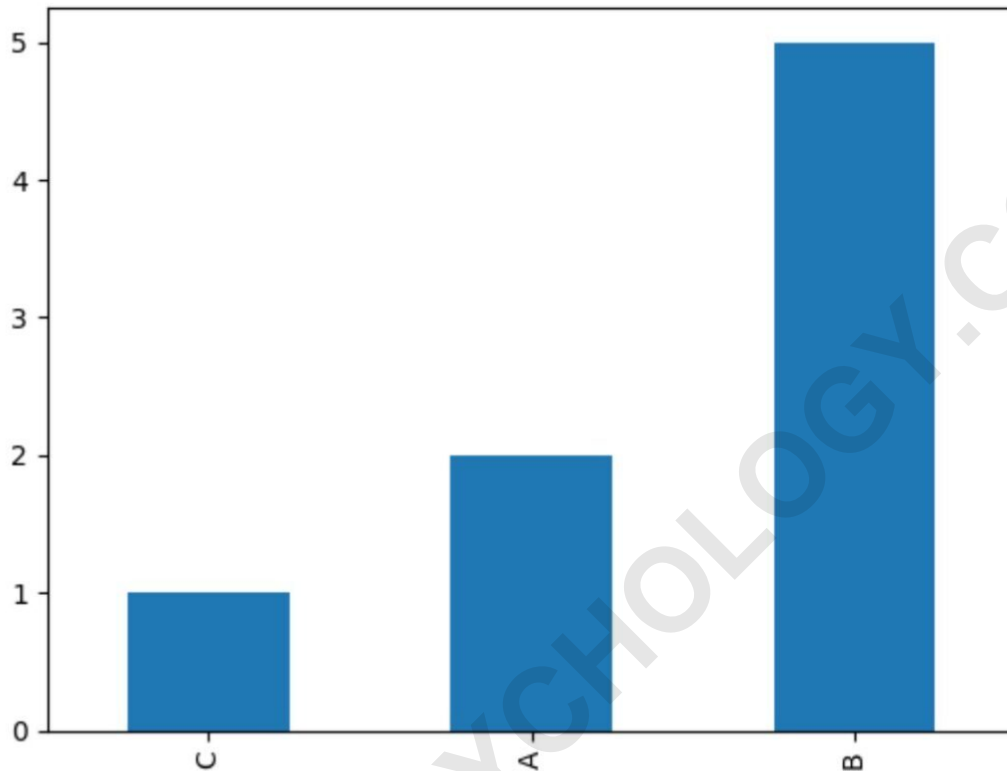
Notice that the bars are sorted in descending order by default.

**Note:** If you'd like to create a horizontal bar chart instead, simply replace `bar` with `barh` in the `kind` argument.

### Example 2: Plot Value Counts in Ascending Order

The following code shows how to plot the value counts in a bar chart in ascending order:

```
#plot value counts of team in descending order  
df.team.value_counts().sort_values().plot(kind='bar')
```



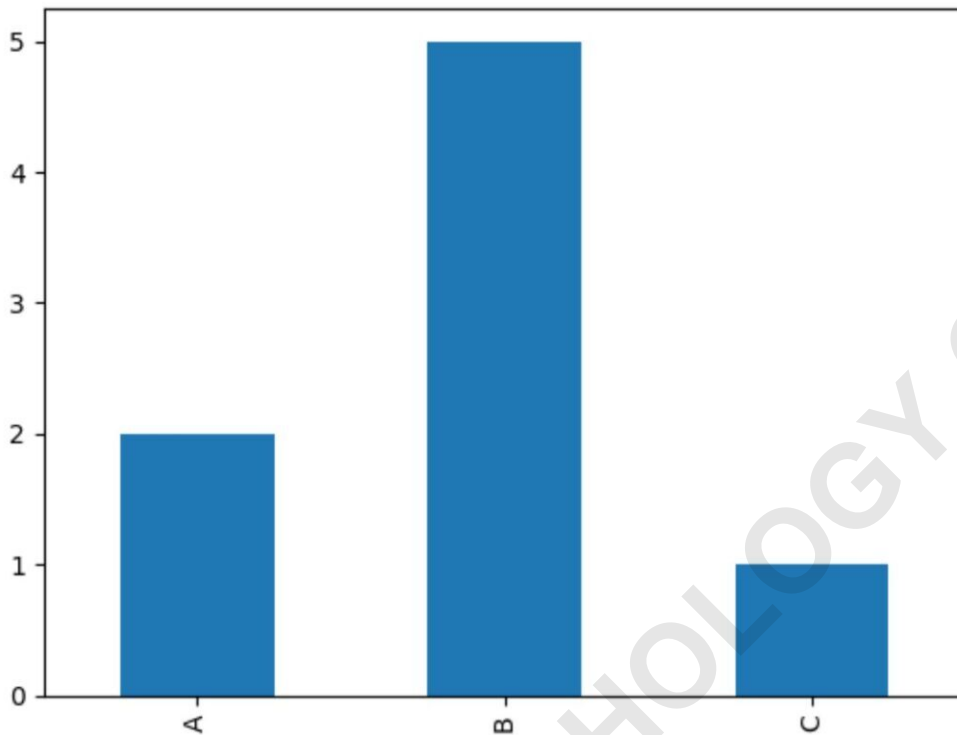
Notice that the bars are now sorted in ascending order.

**Example 3: Plot Value Counts in Order They Appear in DataFrame**

The following code shows how to plot the value counts in a bar chart based on the order they appear in the DataFrame:

```
#plot value counts of team in order they appear in  
DataFrame
```

```
df.team.value_counts().plot(kind='bar')
```



The bars are now sorted based on the order in which they appear in the DataFrame.

For example, the value 'A' occurs first in the team column, then 'B' occurs, then 'C' occurs.

Thus, this is the order the bars are placed in the bar chart.

The following tutorials explain how to perform other

## common tasks in pandas:

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