

How can I annotate bars in a bar plot using Pandas?

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The process of annotating bars in a bar plot using Pandas involves adding descriptive text or labels onto specific bars in the plot. This can be achieved by using the "annotate" function in Pandas, which allows for the placement of text at specified coordinates on the plot. This feature is useful for providing additional information or context to the data visualized in the bar plot. By using the appropriate syntax and parameters, users can easily customize the annotations to suit their specific needs and enhance the overall interpretation of the plot.

Pandas: Annotate Bars in Bar Plot

You can use the following methods to annotate bars in a pandas bar plot:

Method 1: Annotate Bars in Simple Bar Plot

```
ax = df.plot.bar()
```

```
ax.bar_label(ax.containers)
```

Method 2: Annotate Bars in Grouped Bar Plot

```
ax = df.plot.bar()
```

```
for container in ax.containers:
```

```
ax.bar_label(container)
```

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

Example 1: Annotate Bars in Simple Bar Plot

The following code shows how to annotate bars in a simple bar plot:

```
import pandas as pd
```

```
#create DataFrame
```

```
df = pd.DataFrame({'product': ,  
'sales': })
```

```
#view DataFrameprint(df)
```

```
product sales
```

```
0 A 4
```

```
1 B 7
```

```
2 C 8
```

```
3 D 15
```

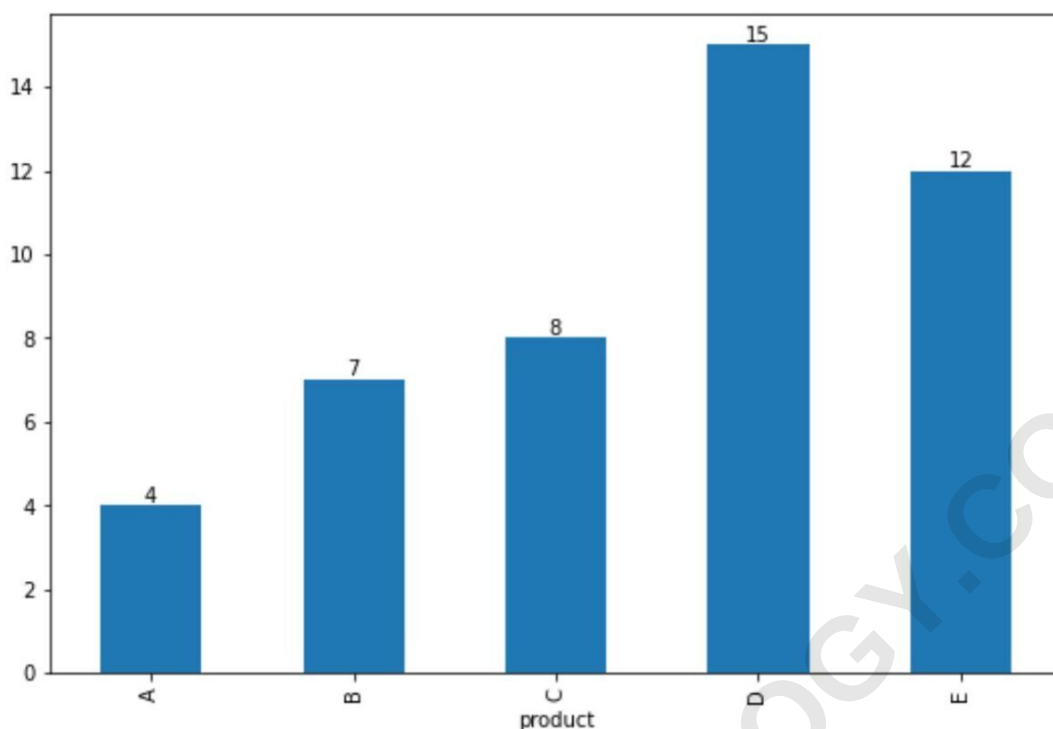
```
4 E 12
```

```
#create bar plot to visualize sales by product
```

```
ax = df.plot.bar(x='product', y='sales', legend=False)
```

```
#annotate bars
```

```
ax.bar_label(ax.containers)
```



Notice that the actual value for the sales is shown at the top of each bar.

Example 2: Annotate Bars in Grouped Bar Plot

The following code shows how to annotate bars in a grouped bar plot:

```
#create DataFrame
```

```
df = pd.DataFrame({'productA': ,  
'productB': },  
index=)
```

```
#view DataFrame
```

```
print(df)
```

```
productA productB
```

```
store 1 14 17
```

```
store 2 10 19
```

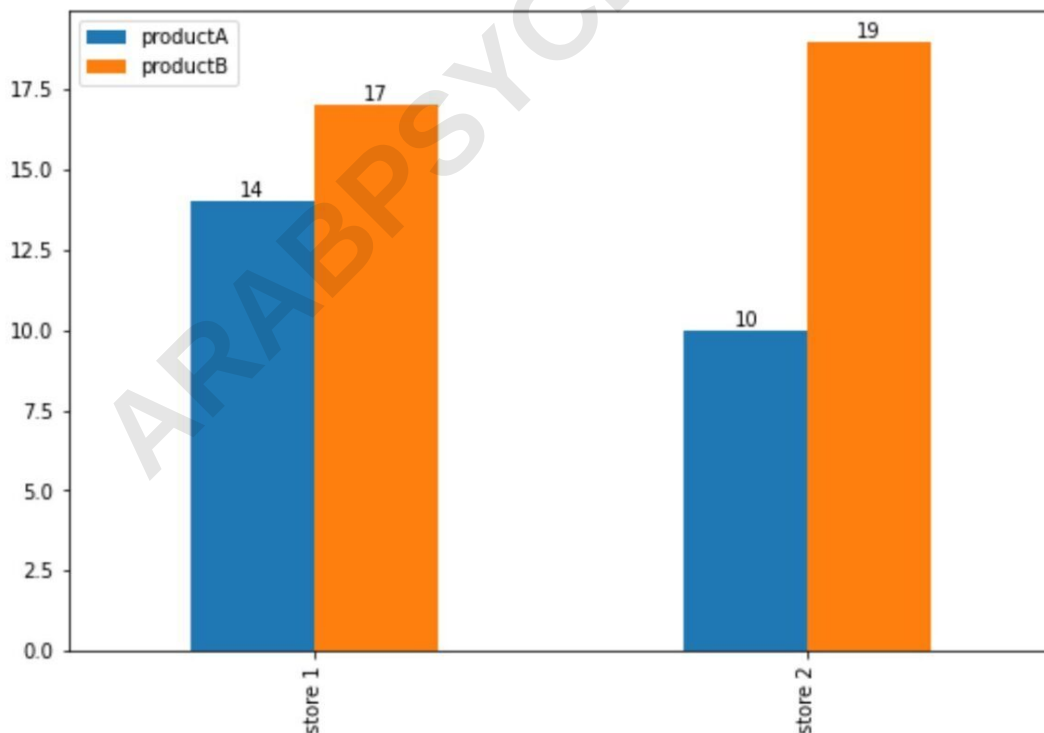
```
#create grouped bar plot
```

```
ax = df.plot.bar()
```

```
#annotate bars in bar plot
```

```
for container in ax.containers:
```

```
ax.bar_label(container)
```



Notice that annotations have been added to each individual bar in the plot.

Additional Resources

ARABPSYCHOLOGY.COM