

How can I count the occurrences of True and False values in a column using Pandas?

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Pandas is a popular Python library used for data analysis. It offers a variety of functions to efficiently manipulate and analyze data, including the ability to count the occurrences of True and False values in a column. To do so, one can use the "value_counts()" function, which calculates the frequency of unique values in a column and returns a Series object. By passing the parameter "dropna=False", the function will also include the counts of missing values, if any. This simple and straightforward approach allows users to easily keep track of the number of True and False values in a given column, providing valuable insights for their data analysis.

Pandas: Count Occurrences of True and False in a Column

You can use the following basic syntax to count the occurrences of True and False values in a column of a pandas DataFrame:

```
df.value_counts()
```

This will count the occurrences of both True and False values.

If you only want to count one of the specific values, you can use the following syntax:

```
#count occurrences of True
```

```
df.values.sum()
```

```
#count occurrences of False
```

```
(~df).values.sum()
```

The following example shows how to use this syntax in practice.

Example: Count Occurrences of True and False in Pandas

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': ,  
'all_star': })
```

```
#view DataFrame
```

```
print(df)
```

```
team points all_star
```

```
0 A 18 True
```

```
1 A 22 False
```

```
2 A 19 False
```

```
3 B 14 True
```

```
4 B 14 False
```

```
5 C 28 True
```

```
6 C 20 True
```

We can use the `value_counts()` function to count the occurrences of both True and False values in the `all_star` column:

```
#count occurrences of True and False in all_star column
```

```
df.value_counts()
```

```
True 4
```

```
False 3
```

```
Name: all_star, dtype: int64
```

From the output we can see:

The value True occurs 4 times in the `all_star` column. The value False occurs 3 times in the `all_star` column.

You can also use the following syntax to only count the occurrences of True:

```
#count occurrences of True in all_star column
```

```
df.values.sum()
```

```
4
```

And you can use the following syntax to only count the occurrences of False:

```
#count occurrences of False in all_star column  
(~df).values.sum()
```

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

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