How can I convert a boolean datatype to a string in a Pandas DataFrame?

Authored by

stats writer

June 24, 2024

Converting a boolean datatype to a string in a Pandas DataFrame can be achieved by using the .astype() method. This method allows for the conversion of data types within a DataFrame, including boolean values. By specifying "str" as the parameter for the .astype() method, the boolean values will be converted to string values. This transformation can be useful for data analysis and manipulation purposes, as it allows for easier comparison and manipulation of boolean values within the DataFrame.

Convert Boolean to String in Pandas DataFrame

You can use the following basic syntax to convert a Boolean column to a string column in a pandas DataFrame:

df = df.replace({True: 'True', False: 'False'})

This particular example replaces each True value with the string 'True' and each False value with the string 'False' in the column called my_bool_column.

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

Example: Convert Boolean to String in Pandas

Suppose we have the following pandas DataFrame:

import pandas as pd

#create DataFrame

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

#view DataFrame
print(df)

team points all_star starter
0 A 18 True False
1 B 20 False True
2 C 25 True True
3 D 40 True True
4 E 34 True False
5 F 32 False False
6 G 19 False False
```

We can use the dtypes function to check the data type of each column in the DataFrame:

```
#view data type of each column
print(df.dtypes)

team object
points int64
```

all_star bool
starter bool
dtype: object

From the output we can see that the all_star and starter columns are both Booleans.

We can use the following syntax to convert the all_star column to a string column:

```
#convert Boolean values in all_star column to strings
df = df.replace({True: 'True', False: 'False'})

#view updated DataFrame
print(df)
```

team points all_star starter
0 A 18 True False
1 B 20 False True
2 C 25 True True
3 D 40 True True
4 E 34 True False
5 F 32 False False
6 G 19 False False

```
#view updated data types of each column
print(df.dtypes)

team object
points int64
all_star object
starter bool
dtype: object
```

From the output we can see that the all_star column has been converted to a string column.

To convert the all_star and starter columns both from Boolean to strings, we can use the following syntax:

```
#convert Boolean values in all_star and starter columns to strings
df] = df].replace({True: 'True', False: 'False'})

#view updated DataFrame
print(df)

team points all_star starter
0 A 18 True False
1 B 20 False True
```

2 C 25 True True
3 D 40 True True
4 E 34 True False
5 F 32 False False
6 G 19 False False

#view updated data types of each column
print(df.dtypes)

team object
points int64
all_star object
starter object
dtype: object

From the output we can see that both Boolean columns have been converted to strings.

Note: You can find the complete documentation for the pandas replace() function .

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