

How can I check if a column in a Pandas dataframe contains a specific string?

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June 28, 2024

RECOMMENDED CITATION

stats writer (2024). *How can I check if a column in a Pandas dataframe contains a specific string?*. PSYCHOLOGICAL SCALES. Retrieved from <https://scales.arabpsychology.com/?p=155729>

The process of determining if a column in a Pandas dataframe contains a specific string involves using the built-in function "str.contains()" along with the desired string as a parameter. This function returns a boolean value, indicating whether the string is present in the column or not. Additionally, the function can be used in conjunction with other methods such as "any()" or "all()" to further refine the search. This method is useful for quickly identifying and filtering data within a dataframe based on specific string criteria.

Pandas: Check if Column Contains String

You can use the following methods to check if a column of a pandas DataFrame contains a string:

Method 1: Check if Exact String Exists in Column

```
(df.eq('exact_string')).any()
```

Method 2: Check if Partial String Exists in Column

```
df.str.contains('partial_string').any()
```

Method 3: Count Occurrences of Partial String in Column

```
df.str.contains('partial_string').sum()
```

This tutorial explains how to use each method in practice with the following DataFrame:

```
import pandas as pd

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

```
#view DataFrame
df
```

```
team conference points
```

```
0 A East 11
```

```
1 A East 8
```

```
2 A South 10
```

```
3 B West 6
```

```
4 B West 6
```

```
5 C East 5
```

Example 1: Check if Exact String Exists in Column

The following code shows how to check if the exact string 'Eas' exists in the conference column of the DataFrame:

```
#check if exact string 'Eas' exists in conference column
```

```
(df.eq('Eas')).any()
```

False

The output returns **False**, which tells us that the exact string 'Eas' does not exist in the conference column of the DataFrame.

Example 2: Check if Partial String Exists in Column

The following code shows how to check if the partial string 'Eas' exists in the conference column of the DataFrame:

```
#check if partial string 'Eas' exists in conference  
column  
df.str.contains('Eas').any()
```

True

The output returns **True**, which tells us that the partial string 'Eas' does exist in the conference column of the DataFrame.

Example 3: Count Occurrences of Partial String in Column

The following code shows how to count the number of

times the partial string 'Eas' occurs in the conference column of the DataFrame:

#count occurrences of partial string 'Eas' in conference column

```
df.str.contains('East').sum()
```

3

The output returns 3, which tells us that the partial string 'Eas' occurs 3 times in the conference column of the DataFrame.

Additional Resources

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