

How do I create a Pandas DataFrame from a Series? Can you provide some examples?

Authored by
stats writer

July 2, 2024

RECOMMENDED CITATION

stats writer (2024). *How do I create a Pandas DataFrame from a Series? Can you provide some examples?*. PSYCHOLOGICAL SCALES. Retrieved from <https://scales.arabpsychology.com/?p=165756>

To create a Pandas DataFrame from a Series, you can use the "pd.DataFrame()" function in Python. This function takes in a Series object as its input and converts it into a tabular data structure with labeled rows and columns. Some examples of creating a DataFrame from a Series include using a dictionary, a list, or a numpy array as the data source for the Series. Once the Series is created, it can be passed as an argument to the DataFrame function to create the desired DataFrame. This process allows for easy manipulation and analysis of data in a tabular format.

Create Pandas DataFrame from Series (With Examples)

Often you may want to create a pandas DataFrame from one or more pandas Series.

The following examples show how to create a pandas DataFrame using existing series as either the rows or columns of the DataFrame.

Example 1: Create Pandas DataFrame Using Series as Columns

Suppose we have the following three pandas Series:

```
import pandas as pd
#define three Series
name = pd.Series()
points = pd.Series()
assists = pd.Series()
```

We can use the following code to convert each series into a DataFrame and then concatenate them all into

one DataFrame:

```
#convert each Series to a DataFrame
```

```
name_df = name.to_frame(name='name')
```

```
points_df = points.to_frame(name='points')
```

```
assists_df = assists.to_frame(name='assists')
```

```
#concatenate three Series into one DataFrame
```

```
df = pd.concat(, axis=1)
```

```
#view final DataFrame
```

```
print(df)
```

```
name points assists
```

```
0 A 34 8
```

```
1 B 20 12
```

```
2 C 21 14
```

```
3 D 57 9
```

```
4 E 68 11
```

Notice that the three series are each represented as columns in the final DataFrame.

Example 2: Create Pandas DataFrame Using Series as Rows

Suppose we have the following three pandas Series:

```
import pandas as pd
#define three Series
row1 = pd.Series()
row2 = pd.Series()
row3 = pd.Series()
```

We can use the following code to combine each of the Series into a pandas DataFrame, using each Series as a row in the DataFrame:

```
#create DataFrame using Series as rows
df = pd.DataFrame()

#create column names for DataFrame
df.columns =

#view resulting DataFrame
print(df)

col1 col2 col3
0 A 34 8
1 B 20 12
2 C 21 14
```

Notice that the three series are each represented as

rows in the final DataFrame.

Additional Resources

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

ARABPSYCHOLOGY.COM