

How can we convert a date column in a Pandas dataframe to the YYYYMMDD format?

Authored by
stats writer

June 26, 2024

RECOMMENDED CITATION

stats writer (2024). *How can we convert a date column in a Pandas dataframe to the YYYYMMDD format?*. PSYCHOLOGICAL SCALES. Retrieved from <https://scales.arabpsychology.com/?p=153281>

To convert a date column in a Pandas dataframe to the YYYYMMDD format, we can use the `strftime()` function. This function allows us to specify the desired date format, in this case `"%Y%m%d"`, which represents the year, month, and day in a numerical format without any separators. This will convert the date column into a string format in the desired format. Additionally, we can use the `to_datetime()` function to convert the string dates back to datetime objects if needed. This method is useful for organizing and sorting date data in a Pandas dataframe.

Pandas: Convert Date to YYYYMMDD Format

You can use the following syntax to convert a date column in a pandas DataFrame to a YYYYMMDD format:

```
#convert date column to datetime
```

```
df = pd.to_datetime(df)
```

```
#convert date to YYYYMMDD format
```

```
df = df.dt.strftime('%Y%m%d').astype(int)
```

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

Example: Convert Date to YYYYMMDD Format in Pandas

Suppose we have the following pandas DataFrame that shows the sales made by some company on various dates:

```
import pandas as pd
```

#create DataFrame

```
df = pd.DataFrame({'date':  
pd.date_range(start='1/1/2022', freq='MS', periods=8),  
'sales': })
```

#view DataFrame

```
print(df)
```

date sales

```
0 2022-01-01 18  
1 2022-02-01 22  
2 2022-03-01 19  
3 2022-04-01 14  
4 2022-05-01 14  
5 2022-06-01 11  
6 2022-07-01 20  
7 2022-08-01 28
```

Now suppose that we would like to format the values in the date column as YYYYMMDD.

We can use the following syntax to do so:

#convert date column to datetime

```
df = pd.to_datetime(df)
```

```
#convert date to YYYYMMDD format  
df = df.dt.strftime('%Y%m%d').astype(int)  
  
#view updated DataFrame  
print(df)
```

```
date sales
```

```
0 20220101 18  
1 20220201 22  
2 20220301 19  
3 20220401 14  
4 20220501 14  
5 20220601 11  
6 20220701 20  
7 20220801 28
```

Notice that the values in the date column are now formatted in a YYYYMMDD format.

Note that in this example, the date column already had a class of datetime.

However, we can use the `to_datetime()` function anyway to ensure that a given column has a class of datetime before applying a YYYYMMDD format.

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

ARABPSYCHOLOGY.COM