How can I add or subtract days from a date in Pandas?

Authored by

stats writer

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Adding or subtracting days from a date in Pandas is a simple task that can be accomplished using the built-in datetime functions. To add days to a date, the timedelta function can be used to specify the number of days to be added. Similarly, to subtract days from a date, the timedelta function can be used with a negative value to indicate the number of days to be subtracted. Additionally, the date offset functions in Pandas, such as the DateOffset or BDay, can also be used to add or subtract specific business days or time intervals from a date. These functions make it easy to manipulate dates in a Pandas dataframe, providing flexibility and convenience for data analysis and manipulation tasks.

Add and Subtract Days from a Date in Pandas

You can use the following methods to add and subtract days from a date in pandas:

Method 1: Add Days to Date

df + pd.Timedelta(days=5)

Method 2: Subtract Days from Date

df - pd.Timedelta(days=5)

The following examples show how to use each method in practice with the following pandas DataFrame:

import pandas as pd

#create DataFrame
df = pd.DataFrame({'date': ,

```
'sales': })

#convert date column to datetime
df = pd.to_datetime(df)

#view DataFrame
print(df)

date sales
0 2022-10-01 450
1 2022-10-23 567
2 2022-10-30 612
3 2022-11-05 701
```

Example 1: Add Days to Date in Pandas

The following code shows how to create a new column that adds five days to the value in the date column:

```
#create new column that adds 5 days to value in date column
df = df + pd.Timedelta(days=5)

#view updated DataFrame
print(df)
```

date sales date_plus_five
0 2022-10-01 450 2022-10-06
1 2022-10-23 567 2022-10-28
2 2022-10-30 612 2022-11-04
3 2022-11-05 701 2022-11-10

The new column date_plus_five represents the values in the date column with five days added to each value.

We can also use the dtypes function to confirm that the new column is indeed a datetime column:

```
#check data type of each column
df.dtypes
```

date datetime64
sales int64
date_plus_five datetime64
dtype: object

Both the date and date_plus_five columns are recognized as datetime formats.

Example 2: Subtract Days from Date in Pandas

The following code shows how to create a new column that subtracts five days from the value in the date column:

```
#create new column that subtracts five days from date
df = df - pd.Timedelta(days=5)

#view updated DataFrame
print(df)
```

```
        date  sales date_minus_five
0 2022-10-01    450      2022-09-26
1 2022-10-23    567      2022-10-18
2 2022-10-30    612      2022-10-25
3 2022-11-05    701      2022-10-31
```

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