```
17 import pandas as pd
```

```
18 s1 = pd.Series([
       '2020-01-01',
       '2020-01-02',
   ], dtype='datetime64[ns]',
      name='Timestamp')
   s1
```

```
18 0   2020-01-01
   1   2020-01-02
   Name: Timestamp, dtype: datetime64[ns]
```

```
19 s1[0]
```

```
19 Timestamp('2020-01-01 00:00:00')
```

```
20 s2 = pd.Series([
       '2020-01-01',
       '2020-01-02',
   ], dtype='period[D]',
      name='Period')
   s2
```

```
20 0    2020-01-01
   1    2020-01-02
   Name: Period, dtype: period[D]
```

```
21 s2[0]
```

```
21 Period('2020-01-01', 'D')
```

```
22 s3 = pd.Series([
       pd.Timedelta(days=-1),
       pd.Timedelta(days=2),
   ], name='Timedelta')
   s3
```

```
22 0   -1 days
   1    2 days
   Name: Timedelta, dtype: timedelta64[ns]
```

```
23 s3[1]
```

```
23 Timedelta('2 days 00:00:00')
```

```
24 s4 = pd.Series([
       pd.DateOffset(days=-1),
       pd.DateOffset(days=2),
   ], name='DateOffset')
   s4
```

```
24 0    <DateOffset: days=-1>
   1     <DateOffset: days=2>
   Name: DateOffset, dtype: object
```

```
25 s5 = pd.Series([
       pd.offsets.BDay(),
       pd.offsets.BDay() * 2,
   ], name='offsets_BDay')
   s5
```

```
25 0         <BusinessDay>
```

```
1    <2 * BusinessDays>
Name: offsets_BDay, dtype: object
```

```
26 s1 + s3
```

```
26 0   2019-12-31
   1   2020-01-04
   dtype: datetime64[ns]
```

```
27 s1 + s4
```

```
/Users/Yi/anaconda3/envs/pandas与办公自动化/lib/python3.7/site-packages/pandas/core/arrays/datetimelike
  PerformanceWarning,
```

```
27 0   2019-12-31
   1   2020-01-04
   dtype: datetime64[ns]
```

```
28 s1 + s5
```

```
28 0   2020-01-02
   1   2020-01-06
   dtype: datetime64[ns]
```

```
29 df = pd.concat(
       [s1, s2, s3, s4, s5],
       axis=1
   )
   df
```

29

	Timestamp	Period	Timedelta	DateOffset	offsets_BDay
0	2020-01-01	2020-01-01	-1 days	<DateOffset: days=-1>	<BusinessDay>
1	2020-01-02	2020-01-02	2 days	<DateOffset: days=2>	<2 * BusinessDays>

```
31 df.to_excel('tb.xlsx', index=False)
```

```
35 df1 = pd.read_excel(
       'tb.xlsx',
       dtype={
           'Timestamp': 'datetime64[ns]',
           'Period': 'Period[D]',
           'Timedelta': 'timedelta64[D]'
       }
   )
   df1
```

35

	Timestamp	Period	Timedelta	DateOffset	offsets_BDay
0	2020-01-01	2020-01-01	-1 days	<DateOffset: days=-1>	<BusinessDay>
1	2020-01-02	2020-01-02	2 days	<DateOffset: days=2>	<2 * BusinessDays>

```
36 df1.dtypes
```

```
36 Timestamp        datetime64[ns]
   Period                period[D]
   Timedelta       timedelta64[ns]
   DateOffset              object
```

```
offsets_BDay            object
dtype: object
```

37
```
df1 = df1.convert_dtypes()
df1
```

37

	Timestamp	Period	Timedelta	DateOffset	offsets_BDay
0	2020-01-01	2020-01-01	-8.640000e+13	<DateOffset: days=-1>	<BusinessDay>
1	2020-01-02	2020-01-02	1.728000e+14	<DateOffset: days=2>	<2 * BusinessDays>

38
```
df1.dtypes
```

38
```
Timestamp       datetime64[ns]
Period               period[D]
Timedelta              float64
DateOffset              string
offsets_BDay            string
dtype: object
```