

```
In [1]: import pandas as pd
```

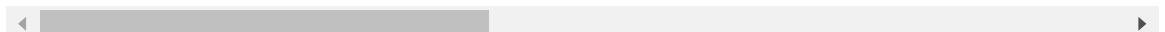
```
In [5]: store=pd.read_csv(r'C:\Users\Dell\Downloads\Sample - Superstore_Orders.csv')
```

```
In [7]: store
```

Out[7]:

	Category	City	Country/Region	Customer Name	Manufacturer	Order Date	Order ID
0	Office Supplies	Houston	United States	Darren Powers	Message Book	03-01-2020	20103
1	Office Supplies	Naperville	United States	Phillina Ober	GBC	04-01-2020	20112
2	Office Supplies	Naperville	United States	Phillina Ober	Avery	04-01-2020	20112
3	Office Supplies	Naperville	United States	Phillina Ober	SAFCO	04-01-2020	20112
4	Office Supplies	Philadelphia	United States	Mick Brown	Avery	05-01-2020	20141
...	...	...	...	...	...	...	...
10189	Office Supplies	New York City	United States	Patrick O'Donnell	Wilson Jones	30-12-2023	20143
10190	Office Supplies	Fairfield	United States	Erica Bern	GBC	30-12-2023	20115
10191	Office Supplies	Loveland	United States	Jill Matthias	Other	30-12-2023	20156
10192	Technology	New York City	United States	Patrick O'Donnell	Other	30-12-2023	20143
10193	Office Supplies	Charlottetown	Canada	Harry Olson	Wilson Jones	30-12-2023	20143

10194 rows × 19 columns



In [9]: id(store)

```
Out[9]: 2081869819024
```

```
In [11]: len(store)
```

```
Out[11]: 10194
```

```
In [15]: store.shape
```

```
Out[15]: (10194, 19)
```

```
In [17]: store.columns
```

```
Out[17]: Index(['Category', 'City', 'Country/Region', 'Customer Name', 'Manufacturer',  
              'Order Date', 'Order ID', 'Postal Code', 'Product Name', 'Region',  
              'Segment', 'Ship Date', 'Ship Mode', 'State/Province', 'Sub-Category',  
              'Discount', 'Profit', 'Quantity', 'Sales'],  
              dtype='object')
```

```
In [19]: len(store.columns)
```

```
Out[19]: 19
```

```
In [21]: store.dtypes
```

```
Out[21]: Category      object  
City                  object  
Country/Region        object  
Customer Name         object  
Manufacturer           object  
Order Date            object  
Order ID              object  
Postal Code           object  
Product Name          object  
Region                object  
Segment               object  
Ship Date             object  
Ship Mode             object  
State/Province        object  
Sub-Category          object  
Discount              float64  
Profit                float64  
Quantity              int64  
Sales                 float64  
dtype: object
```

```
In [23]: store.info()
```

```

<class 'pandas.core.frame.DataFrame'>
RangeIndex: 10194 entries, 0 to 10193
Data columns (total 19 columns):
 #   Column                Non-Null Count  Dtype
---  -
 0   Category              10194 non-null object
 1   City                  10194 non-null object
 2   Country/Region        10194 non-null object
 3   Customer Name          10194 non-null object
 4   Manufacturer           10194 non-null object
 5   Order Date             10194 non-null object
 6   Order ID               10194 non-null object
 7   Postal Code            10194 non-null object
 8   Product Name           10194 non-null object
 9   Region                 10194 non-null object
10   Segment                10194 non-null object
11   Ship Date              10194 non-null object
12   Ship Mode              10194 non-null object
13   State/Province         10194 non-null object
14   Sub-Category           10194 non-null object
15   Discount               10194 non-null float64
16   Profit                 10194 non-null float64
17   Quantity               10194 non-null int64
18   Sales                  10194 non-null float64
dtypes: float64(3), int64(1), object(15)
memory usage: 1.5+ MB

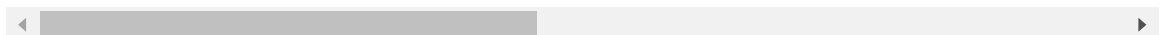
```

In [25]: `store.isnull()`

Out[25]:

	Category	City	Country/Region	Customer Name	Manufacturer	Order Date	Order ID	Postal Code
0	False	False	False	False	False	False	False	False
1	False	False	False	False	False	False	False	False
2	False	False	False	False	False	False	False	False
3	False	False	False	False	False	False	False	False
4	False	False	False	False	False	False	False	False
...	...	...	...	...	...	...	...	...
10189	False	False	False	False	False	False	False	False
10190	False	False	False	False	False	False	False	False
10191	False	False	False	False	False	False	False	False
10192	False	False	False	False	False	False	False	False
10193	False	False	False	False	False	False	False	False

10194 rows × 19 columns



In [27]: `store.isnull().sum()`

```
Out[27]: Category      0
City      0
Country/Region      0
Customer Name      0
Manufacturer      0
Order Date      0
Order ID      0
Postal Code      0
Product Name      0
Region      0
Segment      0
Ship Date      0
Ship Mode      0
State/Province      0
Sub-Category      0
Discount      0
Profit      0
Quantity      0
Sales      0
dtype: int64
```

```
In [29]: store.head()
```

```
Out[29]:
```

	Category	City	Country/Region	Customer Name	Manufacturer	Order Date	Order ID	Po C
0	Office Supplies	Houston	United States	Darren Powers	Message Book	03-01-2020	US-2020-103800	77
1	Office Supplies	Naperville	United States	Phillina Ober	GBC	04-01-2020	US-2020-112326	60
2	Office Supplies	Naperville	United States	Phillina Ober	Avery	04-01-2020	US-2020-112326	60
3	Office Supplies	Naperville	United States	Phillina Ober	SAFCO	04-01-2020	US-2020-112326	60
4	Office Supplies	Philadelphia	United States	Mick Brown	Avery	05-01-2020	US-2020-141817	19

```
In [31]: store.tail()
```

Out[31]:

	Category	City	Country/Region	Customer Name	Manufacturer	Order Date	Order
10189	Office Supplies	New York City	United States	Patrick O'Donnell	Wilson Jones	30-12-2023	20143
10190	Office Supplies	Fairfield	United States	Erica Bern	GBC	30-12-2023	20115
10191	Office Supplies	Loveland	United States	Jill Matthias	Other	30-12-2023	20156
10192	Technology	New York City	United States	Patrick O'Donnell	Other	30-12-2023	20143
10193	Office Supplies	Charlottetown	Canada	Harry Olson	Wilson Jones	30-12-2023	20143

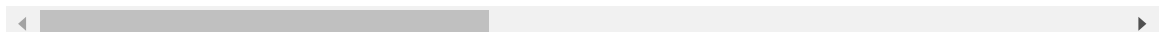
In [35]:

```
store[:]
```

Out[35]:

	Category	City	Country/Region	Customer Name	Manufacturer	Order Date	Order ID
0	Office Supplies	Houston	United States	Darren Powers	Message Book	03-01-2020	20103
1	Office Supplies	Naperville	United States	Phillina Ober	GBC	04-01-2020	20112
2	Office Supplies	Naperville	United States	Phillina Ober	Avery	04-01-2020	20112
3	Office Supplies	Naperville	United States	Phillina Ober	SAFCO	04-01-2020	20112
4	Office Supplies	Philadelphia	United States	Mick Brown	Avery	05-01-2020	20141
...	...	...	...	...	...	...	...
10189	Office Supplies	New York City	United States	Patrick O'Donnell	Wilson Jones	30-12-2023	20143
10190	Office Supplies	Fairfield	United States	Erica Bern	GBC	30-12-2023	20115
10191	Office Supplies	Loveland	United States	Jill Matthias	Other	30-12-2023	20156
10192	Technology	New York City	United States	Patrick O'Donnell	Other	30-12-2023	20143
10193	Office Supplies	Charlottetown	Canada	Harry Olson	Wilson Jones	30-12-2023	20143

10194 rows × 19 columns

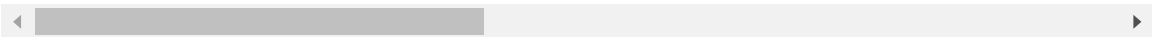


In [37]: store[:: -1]

Out[37]:

	Category	City	Country/Region	Customer Name	Manufacturer	Order Date	Order ID
10193	Office Supplies	Charlottetown	Canada	Harry Olson	Wilson Jones	30-12-2023	20143
10192	Technology	New York City	United States	Patrick O'Donnell	Other	30-12-2023	20143
10191	Office Supplies	Loveland	United States	Jill Matthias	Other	30-12-2023	20156
10190	Office Supplies	Fairfield	United States	Erica Bern	GBC	30-12-2023	20115
10189	Office Supplies	New York City	United States	Patrick O'Donnell	Wilson Jones	30-12-2023	20143
...	...	...	...	...	...	...	...
4	Office Supplies	Philadelphia	United States	Mick Brown	Avery	05-01-2020	20141
3	Office Supplies	Naperville	United States	Phillina Ober	SAFCO	04-01-2020	20112
2	Office Supplies	Naperville	United States	Phillina Ober	Avery	04-01-2020	20112
1	Office Supplies	Naperville	United States	Phillina Ober	GBC	04-01-2020	20112
0	Office Supplies	Houston	United States	Darren Powers	Message Book	03-01-2020	20103

10194 rows × 19 columns



In [39]:

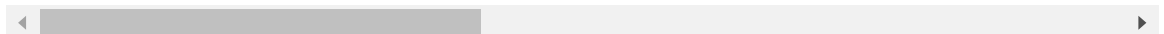
```
store[:,10]
```



Out[39]:

	Category	City	Country/Region	Customer Name	Manufacturer	Order Date	Order ID
0	Office Supplies	Houston	United States	Darren Powers	Message Book	03-01-2020	1038
10	Office Supplies	Henderson	United States	Maria Etezadi	Southworth	06-01-2020	167
20	Furniture	Dover	United States	Seth Vernon	DAX	11-01-2020	1306
30	Office Supplies	San Francisco	United States	Brian Dahlen	Tennsco	13-01-2020	157
40	Office Supplies	Scottsdale	United States	Toby Swindell	GBC	19-01-2020	146
...	...	...	...	...	...	...	...
10150	Office Supplies	Newark	United States	Dan Reichenbach	BIC	27-12-2023	134
10160	Office Supplies	New York City	United States	Jennifer Ferguson	Storex	28-12-2023	164
10170	Technology	New York City	United States	Jennifer Ferguson	Other	28-12-2023	164
10180	Office Supplies	New York City	United States	Michael Chen	Other	29-12-2023	102
10190	Office Supplies	Fairfield	United States	Erica Bern	GBC	30-12-2023	115

1020 rows × 19 columns



In [41]: store[:10]

Out[41]:

	Category	City	Country/Region	Customer Name	Manufacturer	Order Date	Order ID	Po C
0	Office Supplies	Houston	United States	Darren Powers	Message Book	03-01-2020	US-2020-103800	77
1	Office Supplies	Naperville	United States	Phillina Ober	GBC	04-01-2020	US-2020-112326	60
2	Office Supplies	Naperville	United States	Phillina Ober	Avery	04-01-2020	US-2020-112326	60
3	Office Supplies	Naperville	United States	Phillina Ober	SAFCO	04-01-2020	US-2020-112326	60
4	Office Supplies	Philadelphia	United States	Mick Brown	Avery	05-01-2020	US-2020-141817	19
5	Furniture	Henderson	United States	Maria Etezadi	Global	06-01-2020	US-2020-167199	42
6	Office Supplies	Henderson	United States	Maria Etezadi	Rogers	06-01-2020	US-2020-167199	42
7	Office Supplies	Athens	United States	Jack O'Briant	Dixon	06-01-2020	US-2020-106054	30
8	Office Supplies	Henderson	United States	Maria Etezadi	Ibico	06-01-2020	US-2020-167199	42

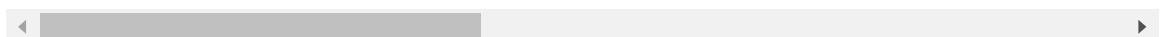
	Category	City	Country/Region	Customer Name	Manufacturer	Order Date	Order ID	Po C
9	Office Supplies	Henderson	United States	Maria Etezadi	Alliance	06-01-2020	US-2020-167199	42

```
In [43]: store[10:]
```

Out[43]:

	Category	City	Country/Region	Customer Name	Manufacturer	Order Date	
10	Office Supplies	Henderson	United States	Maria Etezadi	Southworth	06-01-2020	1
11	Office Supplies	Los Angeles	United States	Lycoris Saunders	Xerox	06-01-2020	1
12	Technology	Henderson	United States	Maria Etezadi	Other	06-01-2020	1
13	Technology	Henderson	United States	Maria Etezadi	GE	06-01-2020	1
14	Furniture	Huntsville	United States	Vivek Sundaresam	Howard Miller	07-01-2020	1
...	...	...	...	...	...	...	...
10189	Office Supplies	New York City	United States	Patrick O'Donnell	Wilson Jones	30-12-2023	1
10190	Office Supplies	Fairfield	United States	Erica Bern	GBC	30-12-2023	1
10191	Office Supplies	Loveland	United States	Jill Matthias	Other	30-12-2023	1
10192	Technology	New York City	United States	Patrick O'Donnell	Other	30-12-2023	1
10193	Office Supplies	Charlottetown	Canada	Harry Olson	Wilson Jones	30-12-2023	1

10184 rows × 19 columns



In [47]: `store.columns`

Out[47]: Index(['Category', 'City', 'Country/Region', 'Customer Name', 'Manufacturer', 'Order Date', 'Order ID', 'Postal Code', 'Product Name', 'Region', 'Segment', 'Ship Date', 'Ship Mode', 'State/Province', 'Sub-Category', 'Discount', 'Profit', 'Quantity', 'Sales'], dtype='object')

In [49]: `store['Category']`

Out[49]:

0	Office Supplies
1	Office Supplies
2	Office Supplies
3	Office Supplies
4	Office Supplies
...	...
10189	Office Supplies
10190	Office Supplies
10191	Office Supplies
10192	Technology
10193	Office Supplies

Name: Category, Length: 10194, dtype: object

In [51]: `store[['Category', 'City']]`

Out[51]:

	Category	City
0	Office Supplies	Houston
1	Office Supplies	Naperville
2	Office Supplies	Naperville
3	Office Supplies	Naperville
4	Office Supplies	Philadelphia
...	...	...
10189	Office Supplies	New York City
10190	Office Supplies	Fairfield
10191	Office Supplies	Loveland
10192	Technology	New York City
10193	Office Supplies	Charlottetown

10194 rows × 2 columns

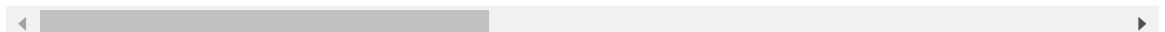
In [57]: `stor_category_txt=store[['Category', 'City', 'Country/Region', 'Customer Name', 'Order Date', 'Order ID', 'Postal Code', 'Product Name', 'Region', 'Segment', 'Ship Date', 'Ship Mode', 'State/Province', 'Sub-Category', 'Discount', 'Profit', 'Quantity', 'Sales']]`

In [59]: `stor_category_txt`

Out[59]:

	Category	City	Country/Region	Customer Name	Manufacturer	Order Date	Order
0	Office Supplies	Houston	United States	Darren Powers	Message Book	03-01-2020	20103
1	Office Supplies	Naperville	United States	Phillina Ober	GBC	04-01-2020	20112
2	Office Supplies	Naperville	United States	Phillina Ober	Avery	04-01-2020	20112
3	Office Supplies	Naperville	United States	Phillina Ober	SAFCO	04-01-2020	20112
4	Office Supplies	Philadelphia	United States	Mick Brown	Avery	05-01-2020	20141
...	...	...	...	...	...	...	...
10189	Office Supplies	New York City	United States	Patrick O'Donnell	Wilson Jones	30-12-2023	20143
10190	Office Supplies	Fairfield	United States	Erica Bern	GBC	30-12-2023	20115
10191	Office Supplies	Loveland	United States	Jill Matthias	Other	30-12-2023	20156
10192	Technology	New York City	United States	Patrick O'Donnell	Other	30-12-2023	20143
10193	Office Supplies	Charlottetown	Canada	Harry Olson	Wilson Jones	30-12-2023	20143

10194 rows × 19 columns



In [61]: stor\_category\_txt.dtypes

```
Out[61]: Category      object
        City           object
        Country/Region  object
        Customer Name   object
        Manufacturer     object
        Order Date      object
        Order ID        object
        Postal Code      object
        Product Name     object
        Region          object
        Segment         object
        Ship Date       object
        Ship Mode        object
        State/Province   object
        Sub-Category     object
        Discount        float64
        Profit          float64
        Quantity        int64
        Sales           float64
        dtype: object
```

```
In [63]: store.shape
```

```
Out[63]: (10194, 19)
```

```
In [ ]:
```