```
In [1]: import pandas as pd
In [2]: store = pd.read csv(r"C:\Users\Jan Saida\Downloads\Sample - Superstore Orders.csv")
In [3]: store
                                                                                            Order
                                                                                                     Order
                                                                                                            Postal
                                                                                                                        Product
                                                                Customer
                    Category
                                        City Country/Region
                                                                            Manufacturer
                                                                                                                                  Region
                                                                                                                                           Segment
                                                                                             Date
                                                                                                        ID
                                                                                                              Code
                                                                    Name
                                                                                                                          Name
                                                                                                                       Message
                                                                                                                          Book.
                                                                                              03-
                                                                                                       US-
                        Office
                                                                                 Message
                                                                                                                     Wirebound.
                                                                    Darren
               0
                                    Houston
                                                  United States
                                                                                              01-
                                                                                                     2020-
                                                                                                             77095
                                                                                                                                   Central Consumer
                                                                                                                      Four 5 1/2"
                     Supplies
                                                                   Powers
                                                                                    Book
                                                                                             2020
                                                                                                   103800
                                                                                                                           X 4'
                                                                                                                         Form...
                                                                                                                           GBC
                                                                                                                       Standard
                                                                                              04-
                                                                                                       US-
                        Office
                                                                   Phillina
                                                                                                                          Plastic
                                                                                                                                               Home
                                   Naperville
                                                  United States
                                                                                     GBC
                                                                                              01-
                                                                                                     2020-
                                                                                                             60540
                                                                                                                                   Central
                     Supplies
                                                                     Oher
                                                                                                                         Binding
                                                                                                                                               Office
                                                                                             2020
                                                                                                   112326
                                                                                                                        Systems
                                                                                                                         Combs
                                                                                                       US-
                                                                                              04-
                        Office
                                                                    Phillina
                                                                                                                                               Home
                                                                                    Avery
                                                                                                             60540
                                                  United States
                                                                                              01-
                                                                                                     2020-
               2
                                   Naperville
                                                                                                                       Avery 508
                                                                                                                                  Central
                                                                                                                                                Office
                     Supplies
                                                                     Ober
                                                                                             2020
                                                                                                   112326
                                                                                                                         SAFCO
                                                                                              04-
                                                                                                       US-
                        Office
                                                                   Phillina
                                                                                                                         Boltless
                                                                                                                                               Home
               3
                                   Naperville
                                                  United States
                                                                                  SAFCO
                                                                                              01-
                                                                                                     2020-
                                                                                                             60540
                                                                                                                                  Central
                     Supplies
                                                                     Ober
                                                                                                                           Steel
                                                                                                                                               Office
                                                                                             2020
                                                                                                   112326
                                                                                                                        Shelving
                                                                                                                       Avery Hi-
                                                                                                                           Liter
                                                                                              05-
                                                                                                       US-
                        Office
                                                                      Mick
                                                                                                                       EverBold
                                 Philadelphia
                                                  United States
                                                                                    Avery
                                                                                              01-
                                                                                                     2020-
                                                                                                             19143
                                                                                                                                     East Consumer
                     Supplies
                                                                    Brown
                                                                                                                       Pen Style
                                                                                             2020
                                                                                                   141817
                                                                                                                     Fluorescent
                                                                                                                          Wilson
                                                                                              30-
                                                                                                       US-
                                                                                                                          Jones
                        Office
                                   New York
                                                                    Patrick
          10189
                                                  United States
                                                                             Wilson Jones
                                                                                              12-
                                                                                                     2023-
                                                                                                             10009
                                                                                                                      Legal Size
                                                                                                                                     Fast Consumer
                                        City
                                                                 O'Donnell
                     Supplies
                                                                                             2023
                                                                                                   143259
                                                                                                                           Ring
                                                                                                                         Binders
                                                                                              30-
                                                                                                       US-
                                                                                                                           GBC
                        Office
          10190
                                                                                                                         Binding
                                     Fairfield
                                                 United States Frica Bern
                                                                                     GBC
                                                                                                     2023-
                                                                                                             94533
                                                                                              12-
                                                                                                                                     West Corporate
                     Supplies
                                                                                             2023
                                                                                                   115427
                                                                                                                          covers
                                                                                              30-
                                                                                                       US-
                                                                                                                         Bagged
                        Office
                                                                        .lill
          10191
                                                                                              12-
                                                                                                     2023-
                                                                                                             80538
                                    Loveland
                                                  United States
                                                                                    Other
                                                                                                                                     West Consumer
                                                                                                                         Rubber
                     Supplies
                                                                  Matthias
                                                                                             2023
                                                                                                    156720
                                                                                                                          Bands
                                                                                              30-
                                                                                                       US-
                                                                                                                      Gear Head
                                   New York
                                                                    Patrick
          10192 Technology
                                                  United States
                                                                                    Other
                                                                                              12-
                                                                                                     2023-
                                                                                                             10009
                                                                                                                       AU3700S
                                                                                                                                     East Consumer
                                                                 O'Donnell
                                         City
                                                                                             2023
                                                                                                    143259
                                                                                                                        Headset
                                                                                                                          Wilson
                                                                                              30-
                                                                                                       CA-
                        Office
                                                                     Harry
                                                                                                                          Jones
          10193
                               Charlottetown
                                                                             Wilson Jones
                                                                                                               C<sub>0</sub>A
                                                                                                                                     East Consumer
                                                       Canada
                                                                                              12-
                                                                                                     2023-
                     Supplies
                                                                                                                          Impact
                                                                     Olson
                                                                                             2023
                                                                                                   143500
                                                                                                                         Binders
          10194 rows × 19 columns
In [4]:
          store.shape
Out[4]:
          (10194, 19)
In [5]:
          len(store)
Out[5]:
          10194
In [6]: pd. version
          '2.2.2'
Out[6]:
In [7]: store.columns
Out[7]: 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')

```
Out[8]: 19
 In [9]: type(store)
Out[9]: pandas.core.frame.DataFrame
In [10]: id(store)
Out[10]: 1900540787936
In [11]: store.info
Out[11]: <bound method DataFrame.info of
                                                                         City Country/Region
                                                                                                  Customer Name \
                                                      Category
                Office Supplies Houston United States
Office Supplies Naperville United States
                                                                  Darren Powers
         1
                                                                  Phillina Ober
                Office Supplies Naperville United States
         2
                                                                  Phillina Ober
         3
                Office Supplies
                                   Naperville United States
                                                                  Phillina Ober
                Office Supplies Philadelphia United States
         4
                                                                    Mick Brown
                                                         . . .
         10189 Office Supplies New York City United States Patrick O'Donnell
         10190 Office Supplies
                                     Fairfield United States
                                                                    Erica Bern
         10191 Office Supplies
                                     Loveland United States
                                                                  Jill Matthias
                    Technology New York City United States Patrick O'Donnell
         10193 Office Supplies Charlottetown
                                                     Canada
                                                                   Harry Olson
                Manufacturer Order Date
                                               Order ID Postal Code \
         0
                Message Book 03-01-2020 US-2020-103800
         1
                        GBC 04-01-2020 US-2020-112326
                                                              60540
                       Avery 04-01-2020 US-2020-112326
SAFC0 04-01-2020 US-2020-112326
         2
                                                              60540
                                                              60540
         3
                       Avery 05-01-2020 US-2020-141817
                                                              19143
                        . . .
         10189 Wilson Jones
                              30-12-2023 US-2023-143259
                                                              10009
                       GBC 30-12-2023 US-2023-115427
         10190
                                                              94533
         10191
                       Other 30-12-2023 US-2023-156720
                                                              80538
         10192 Other 30-12-2023 US-2023-143259
10193 Wilson Jones 30-12-2023 CA-2023-143500
                                                              10009
                                                    Product Name Region \
                Message Book, Wirebound, Four 5 1/2" X 4" Form... Central
         0
         1
                       GBC Standard Plastic Binding Systems Combs
                                                       Avery 508 Central
         2
                                    SAFCO Boltless Steel Shelving Central
         4
                Avery Hi-Liter EverBold Pen Style Fluorescent ...
         10189
                             Wilson Jones Legal Size Ring Binders
                                                                    East
         10190
                                              GBC Binding covers
         10191
                                             Bagged Rubber Bands
                                                                     West
         10192
                                        Gear Head AU3700S Headset
                                                                     East
                                      Wilson Jones Impact Binders
         10193
                                                                     East
                                                        State/Province \
                   Segment Ship Date
                                             Ship Mode
                   Consumer 07-01-2020 Standard Class
         0
                                                                       Texas
                Home Office 08-01-2020 Standard Class
                                                                    Illinois
         1
         2
                Home Office 08-01-2020 Standard Class
                                                                    Illinois
         3
                Home Office 08-01-2020 Standard Class
                                                                    Illinois
                  Consumer 12-01-2020 Standard Class
         4
                                                               Pennsylvania
                       . . .
         10189
                 Consumer 03-01-2024 Standard Class
                                                                    New York
         10190
                  Corporate 03-01-2024 Standard Class
                                                                  California
         10191
                   Consumer 03-01-2024 Standard Class
                                                                    Colorado
                   Consumer 03-01-2024 Standard Class
         10192
                                                                    New York
                   Consumer 03-01-2024 Standard Class Prince Edward Island
         10193
                                                          Sales
               Sub-Category Discount Profit Quantity
         0
                  Paper 0.2 5.5512 2
                                                         16.448
         1
                    Binders
                                 0.8 -5.4870
                                                      2
                                                         3.540
                                                    3
                                 0.2 4.2717
         2
                    Labels
                                                          11.784
                             0.2 -64.7748
0.2 4.8840
                                                      3 272.736
         3
                    Storage
                                                     3 19.536
                    Art
                       . . .
                                         . . .
                                 0.2 19.7910
0.2 6.4750
                                                         52.776
         10189
                    Binders
                                                      2 20.720
         10190
                    Binders
         10191
                  Fasteners
                                 0.2 -0.6048
                                                          3.024
                                                     7 90.930
         10192
                    Phones
                                 0.0 2.7279
         10193
                    Binders
                                 0.2 -0.6048
                                                          3.024
         [10194 rows x 19 columns]>
```

In [8]: len(store.columns)

In [12]: store.info()

```
0
               Category
                                 10194 non-null
                                                   object
          1
                                 10194 non-null
               City
                                                   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
                                                   obiect
          8
               Product Name
                                 10194 non-null
                                                   object
          9
               Region
                                 10194 non-null
                                                   object
          10
               Seament
                                 10194 non-null
                                                   obiect
          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
                                                   float64
          15
               Discount
                                 10194 non-null
          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 [13]: store.dtypes
Out[13]: 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 [14]: store.isnull()
Out[14]:
                                                   Customer
                                                                            Order
                                                                                   Order
                                                                                          Postal
                                                                                                 Product
                                                                                                                              Ship
                                                                                                                                    Ship
                  Category
                             City
                                   Country/Region
                                                              Manufacturer
                                                                                                          Region Segment
                                                                                                                             Date
                                                                                                                                    Mode
                                                       Name
                                                                             Date
                                                                                      ID
                                                                                           Code
                                                                                                   Name
                     False
                                            False
               0
                           False
                                                       False
                                                                     False
                                                                            False
                                                                                   False
                                                                                           False
                                                                                                    False
                                                                                                            False
                                                                                                                             False
                                                                                                                                    False
                                                                                                                      False
                            False
                                            False
                                                       False
                                                                            False
                                                                                                    False
                                                                                                            False
                                                                                                                       False
                                                                                                                             False
                                                                                                                                    False
                      False
                                                                     False
                                                                                   False
                                                                                           False
               2
                      False
                            False
                                            False
                                                       False
                                                                     False
                                                                            False
                                                                                   False
                                                                                           False
                                                                                                    False
                                                                                                            False
                                                                                                                       False
                                                                                                                             False
                                                                                                                                    False
               3
                     False
                            False
                                            False
                                                       False
                                                                     False
                                                                            False
                                                                                   False
                                                                                           False
                                                                                                    False
                                                                                                            False
                                                                                                                      False
                                                                                                                             False
                                                                                                                                    False
               4
                                            False
                                                                     False
                                                                            False
                                                                                   False
                                                                                           False
                                                                                                    False
                                                                                                            False
                                                                                                                                    False
                     False False
                                                       False
                                                                                                                      False
                                                                                                                             False
               ...
           10189
                      False False
                                            False
                                                       False
                                                                     False
                                                                            False
                                                                                   False
                                                                                           False
                                                                                                    False
                                                                                                            False
                                                                                                                      False False
                                                                                                                                    False
           10190
                     False
                            False
                                            False
                                                       False
                                                                     False
                                                                            False
                                                                                   False
                                                                                           False
                                                                                                    False
                                                                                                            False
                                                                                                                      False
                                                                                                                             False
                                                                                                                                    False
           10191
                     False False
                                            False
                                                       False
                                                                     False
                                                                            False
                                                                                   False
                                                                                           False
                                                                                                    False
                                                                                                            False
                                                                                                                            False
                                                                                                                                    False
                                                                                                                      False
           10192
                      False
                           False
                                            False
                                                       False
                                                                     False
                                                                            False
                                                                                   False
                                                                                           False
                                                                                                    False
                                                                                                            False
                                                                                                                       False
                                                                                                                             False
                                                                                                                                    False
           10193
                     False False
                                            False
                                                       False
                                                                     False
                                                                            False
                                                                                   False
                                                                                           False
                                                                                                    False
                                                                                                            False
                                                                                                                      False False
                                                                                                                                    False
          10194 rows × 19 columns
In [15]: store.isnull().sum()
```

<class 'pandas.core.frame.DataFrame'>
RangeIndex: 10194 entries, 0 to 10193
Data columns (total 19 columns):

Non-Null Count

Dtype

#

Column

Out[15]:	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 [16]: store.isna()

Out[16]:

	Category	City	Country/Region	Customer Name	Manufacturer	Order Date	Order ID	Postal Code	Product Name	Region	Segment	Ship Date	Ship Mode
() False	False	False	False	False	False	False	False	False	False	False	False	False
1	False	False	False	False	False	False	False	False	False	False	False	False	False
2	2 False	False	False	False	False	False	False	False	False	False	False	False	False
3	B False	False	False	False	False	False	False	False	False	False	False	False	False
4	l False	False	False	False	False	False	False	False	False	False	False	False	False
10189	False	False	False	False	False	False	False	False	False	False	False	False	False
10190) False	False	False	False	False	False	False	False	False	False	False	False	False
10191	False	False	False	False	False	False	False	False	False	False	False	False	False
10192	2 False	False	False	False	False	False	False	False	False	False	False	False	False
10193	B False	False	False	False	False	False	False	False	False	False	False	False	False

10194 rows × 19 columns

In [17]: store.head()

Out[17]:

	Category	City	Country/Region	Customer Name	Manufacturer	Order Date	Order ID	Postal Code	Product Name	Region	Segment	Ship Date	
(Office Supplies	Houston	United States	Darren Powers	Message Book	03- 01- 2020	US- 2020- 103800	77095	Message Book, Wirebound, Four 5 1/2" X 4" Form	Central	Consumer	07- 01- 2020	S
1	Office Supplies	Naperville	United States	Phillina Ober	GBC	04- 01- 2020	US- 2020- 112326	60540	GBC Standard Plastic Binding Systems Combs	Central	Home Office	08- 01- 2020	S
2	Office Supplies	Naperville	United States	Phillina Ober	Avery	04- 01- 2020	US- 2020- 112326	60540	Avery 508	Central	Home Office	08- 01- 2020	S
3	Office Supplies	Naperville	United States	Phillina Ober	SAFCO	04- 01- 2020	US- 2020- 112326	60540	SAFCO Boltless Steel Shelving	Central	Home Office	08- 01- 2020	S
4	Office Supplies	Philadelphia	United States	Mick Brown	Avery	05- 01- 2020	US- 2020- 141817	19143	Avery Hi- Liter EverBold Pen Style Fluorescent	East	Consumer	12- 01- 2020	S

In [18]: store[0:11]

	Category	City	Country/Region	Customer Name	Manufacturer	Order Date	Order ID	Postal Code	Product Name	Region	Segment	Ship Date
0	Office Supplies	Houston	United States	Darren Powers	Message Book	03- 01- 2020	US- 2020- 103800	77095	Message Book, Wirebound, Four 5 1/2" X 4" Form	Central	Consumer	07- 01- 2020
1	Office Supplies	Naperville	United States	Phillina Ober	GBC	04- 01- 2020	US- 2020- 112326	60540	GBC Standard Plastic Binding Systems Combs	Central	Home Office	08- 01- 2020
2	Office Supplies	Naperville	United States	Phillina Ober	Avery	04- 01- 2020	US- 2020- 112326	60540	Avery 508	Central	Home Office	08- 01- 2020
3	Office Supplies	Naperville	United States	Phillina Ober	SAFCO	04- 01- 2020	US- 2020- 112326	60540	SAFCO Boltless Steel Shelving	Central	Home Office	08- 01- 2020
4	Office Supplies	Philadelphia	United States	Mick Brown	Avery	05- 01- 2020	US- 2020- 141817	19143	Avery Hi- Liter EverBold Pen Style Fluorescent	East	Consumer	12- 01- 2020
5	Furniture	Henderson	United States	Maria Etezadi	Global	06- 01- 2020	US- 2020- 167199	42420	Global Deluxe High-Back Manager's Chair	South	Home Office	10- 01- 2020
6	Office Supplies	Henderson	United States	Maria Etezadi	Rogers	06- 01- 2020	US- 2020- 167199	42420	Rogers Handheld Barrel Pencil Sharpener	South	Home Office	10- 01- 2020
7	Office Supplies	Athens	United States	Jack O'Briant	Dixon	06- 01- 2020	US- 2020- 106054	30605	Dixon Prang Watercolor Pencils, 10- Color Set w	South	Corporate	07- 01- 2020
8	Office Supplies	Henderson	United States	Maria Etezadi	Ibico	06- 01- 2020	US- 2020- 167199	42420	Ibico Hi- Tech Manual Binding System	South	Home Office	10- 01- 2020
9	Office Supplies	Henderson	United States	Maria Etezadi	Alliance	06- 01- 2020	US- 2020- 167199	42420	Alliance Super-Size Bands, Assorted Sizes	South	Home Office	10- 01- 2020
10	Office Supplies	Henderson	United States	Maria Etezadi	Southworth	06- 01- 2020	US- 2020- 167199	42420	Southworth 25% Cotton Granite Paper & Envelopes	South	Home Office	10- 01- 2020

In [19]: store.tail()

Out[18]:

Out[19]:		Category	City	Country/Region	Customer Name	Manufacturer	Order Date	Order ID	Postal Code	Product Name	Region	Segment	SI Di
	10189	Office	New York	United States	Patrick	Wilson Jones	30- 12-	US- 2023-	10009	Wilson Jones Legal	East	Consumer	(

	Category	City	Country/Region	Name	Manutacturer	Date	ID	Code	Name	Region	Segment	Da
10189	Office Supplies	New York City	United States	Patrick O'Donnell	Wilson Jones	30- 12- 2023	US- 2023- 143259	10009	Wilson Jones Legal Size Ring Binders	East	Consumer	((20
10190	Office Supplies	Fairfield	United States	Erica Bern	GBC	30- 12- 2023	US- 2023- 115427	94533	GBC Binding covers	West	Corporate	(20
10191	Office Supplies	Loveland	United States	Jill Matthias	Other	30- 12- 2023	US- 2023- 156720	80538	Bagged Rubber Bands	West	Consumer	((20
10192	Technology	New York City	United States	Patrick O'Donnell	Other	30- 12- 2023	US- 2023- 143259	10009	Gear Head AU3700S Headset	East	Consumer	20
10193	Office Supplies	Charlottetown	Canada	Harry Olson	Wilson Jones	30- 12- 2023	CA- 2023- 143500	C0A	Wilson Jones Impact Binders	East	Consumer	((20

Out[20]:

In [20]: store.head(20)

:		Category	City	Country/Region	Customer Name	Manufacturer	Order Date	Order ID	Postal Code	Product Name	Region	Segment	Sh Da
	0	Office Supplies	Houston	United States	Darren Powers	Message Book	03- 01- 2020	US- 2020- 103800	77095	Message Book, Wirebound, Four 5 1/2" X 4" Form	Central	Consumer	0 0 202
	1	Office Supplies	Naperville	United States	Phillina Ober	GBC	04- 01- 2020	US- 2020- 112326	60540	GBC Standard Plastic Binding Systems Combs	Central	Home Office	0 0 202
	2	Office Supplies	Naperville	United States	Phillina Ober	Avery	04- 01- 2020	US- 2020- 112326	60540	Avery 508	Central	Home Office	0 0 202
	3	Office Supplies	Naperville	United States	Phillina Ober	SAFCO	04- 01- 2020	US- 2020- 112326	60540	SAFCO Boltless Steel Shelving	Central	Home Office	0 0 202
	4	Office Supplies	Philadelphia	United States	Mick Brown	Avery	05- 01- 2020	US- 2020- 141817	19143	Avery Hi- Liter EverBold Pen Style Fluorescent	East	Consumer	1: 0 202
	5	Furniture	Henderson	United States	Maria Etezadi	Global	06- 01- 2020	US- 2020- 167199	42420	Global Deluxe High-Back Manager's Chair	South	Home Office	1 0 202
	6	Office Supplies	Henderson	United States	Maria Etezadi	Rogers	06- 01- 2020	US- 2020- 167199	42420	Rogers Handheld Barrel Pencil Sharpener	South	Home Office	1 0 202
	7	Office Supplies	Athens	United States	Jack O'Briant	Dixon	06- 01- 2020	US- 2020- 106054	30605	Dixon Prang Watercolor Pencils, 10- Color Set w	South	Corporate	0 0 202
	8	Office Supplies	Henderson	United States	Maria Etezadi	Ibico	06- 01- 2020	US- 2020- 167199	42420	Ibico Hi- Tech Manual Binding System	South	Home Office	1 0 202
	9	Office Supplies	Henderson	United States	Maria Etezadi	Alliance	06- 01- 2020	US- 2020- 167199	42420	Alliance Super-Size Bands, Assorted Sizes	South	Home Office	1 0 202

Southworth

	10	Office Supplies	Henderson	Ur	nited States	Maria Etezadi	Southworth	06- 01- 2020	US- 2020- 167199	42420	25% Cotton Granite Paper & Envelopes	South	Home Office	1 0 202
	11	Office Supplies	Los Angeles	Ur	nited States	Lycoris Saunders	Xerox	06- 01- 2020	US- 2020- 130813	90049	Xerox 225	West	Consumer	0 0 202
	12	Technology	Henderson	Ur	nited States	Maria Etezadi	Other	06- 01- 2020	US- 2020- 167199	42420	Wireless Extenders zBoost YX545 SOHO Signal Bo	South	Home Office	1 0 202
	13	Technology	Henderson	Ur	nited States	Maria Etezadi	GE	06- 01- 2020	US- 2020- 167199	42420	GE 30524EE4	South	Home Office	1 0 202
	14	Furniture	Huntsville	Ur	nited States	Vivek Sundaresam	Howard Miller	07- 01- 2020	US- 2020- 105417	77340	Howard Miller 14- 1/2" Diameter Chrome Round Wa	Central	Consumer	1: 0 202
	15	Office Supplies	Huntsville	Ur	nited States	Vivek Sundaresam	Acco	07- 01- 2020	US- 2020- 105417	77340	Acco Four Pocket Poly Ring Binder with Label H	Central	Consumer	1 0 202
	16	Office Supplies	Laredo	Ur	nited States	Melanie Seite	Newell	09- 01- 2020	US- 2020- 135405	78041	Newell 312	Central	Consumer	1 0 202
	17	Technology	Laredo	Ur	nited States	Melanie Seite	Memorex	09- 01- 2020	US- 2020- 135405	78041	Memorex Micro Travel Drive 8 GB	Central	Consumer	1 0 202
	18	Furniture	Springfield	Ur	nited States	Anthony Jacobs	Howard Miller	10- 01- 2020	US- 2020- 149020	22153	Howard Miller 11- 1/2" Diameter Ridgewood Wall	South	Corporate	1: 0 202
	19	Office Supplies	Springfield	Ur	nited States	Anthony Jacobs	Avery	10- 01- 2020	US- 2020- 149020	22153	Avery 482	South	Corporate	1: 0 202
														Þ
	sto	re.tail(30)												
:		Catego	ry	City	Country/Reg	ion Custom Nan		er Ord	ler Ord	der Post ID Cod			on Segm	ent
	101	64 Offic Supplie		York City	United Sta	ates Jennif Ferguse		er 1 20	12- 202 23 1648		Bind	tal _F	ast Consur	ner

In [21]:

Out[21]:

	Category	City	Country/Region	Customer Name	Manufacturer	Order Date	Order ID	Postal Code	Product Name	Region	Segment
10164	Office Supplies	New York City	United States	Jennifer Ferguson	Other	28- 12- 2023	US- 2023- 164826	10024	OIC Bulk Pack Metal Binder Clips	East	Consumer
10165	Office Supplies	New York City	United States	Jennifer Ferguson	Avery	28- 12- 2023	US- 2023- 164826	10024	Avery 473	East	Consumer
10166	Office Supplies	Albuquerque	United States	Susan Vittorini	Xerox	28- 12- 2023	US- 2023- 122798	87105	Xerox 1953	West	Consumer
10167	Office Supplies	Nashville	United States	Erica Hernandez	Carina	28- 12- 2023	US- 2023- 127516	37211	Carina Double Wide Media Storage Towers in Nat	South	Home Office
10168	Office Supplies	Albuquerque	United States	Susan Vittorini	Eldon	28- 12- 2023	US- 2023- 122798	87105	Eldon Mobile Mega Data Cart Mega Stackable A	West	Consumer
10169	Office Supplies	San Francisco	United States	Kristen Hastings	Other	28- 12- 2023	US- 2023- 163979	94110	Adjustable Depth Letter/Legal Cart	West	Corporate
		New York		Jennifer		28-	US-		Cush Cases Heavy Duty		

10170	Technology	City	United States	Ferguson	Other	12- 2023	2023- 164826	10024	Rugged Cover Case for Sa	East	Consumer
10171	Furniture	Louisville	United States	Katherine Hughes	Other	29- 12- 2023	US- 2023- 158526	40214	Harbour Creations Steel Folding Chair	South	Consumer
10172	Furniture	Louisville	United States	Katherine Hughes	DMI	29- 12- 2023	US- 2023- 158526	40214	DMI Arturo Collection Mission- style Design Woo	South	Consumer
10173	Furniture	Los Angeles	United States	James Galang	Global	29- 12- 2023	US- 2023- 118885	90049	Global High-Back Leather Tilter, Burgundy	West	Consumer
10174	Furniture	Louisville	United States	Katherine Hughes	Global	29- 12- 2023	US- 2023- 158526	40214	Global Leather and Oak Executive Chair, Black	South	Consumer
10175	Furniture	Anaheim	United States	Ben Peterman	Nu-Dell	29- 12- 2023	US- 2023- 146626	92804	Nu-Dell Executive Frame	West	Corporate
10176	Furniture	Edmonds	United States	Bruce Stewart	Other	29- 12- 2023	US- 2023- 130631	98026	Hand- Finished Solid Wood Document Frame	West	Consumer
10177	Office Supplies	Louisville	United States	Katherine Hughes	Panasonic	29- 12- 2023	US- 2023- 158526	40214	Panasonic KP-350BK Electric Pencil Sharpener W	South	Consumer
10178	Office Supplies	Louisville	United States	Katherine Hughes	GBC	29- 12- 2023	US- 2023- 158526	40214	GBC ProClick Spines for 32-Hole Punch	South	Consumer
10179	Office Supplies	Edmonds	United States	Bruce Stewart	Acco	29- 12- 2023	US- 2023- 130631	98026	Acco Glide Clips	West	Consumer
10180	Office Supplies	New York City	United States	Michael Chen	Other	29- 12- 2023	US- 2023- 102638	10035	Ideal Clamps	East	Consumer
10181	Office Supplies	Grand Rapids	United States	Ken Brennan	Xerox	29- 12- 2023	US- 2023- 158673	49505	Xerox 1915	Central	Corporate
10182	Technology	Los Angeles	United States	James Galang	Other	29- 12- 2023	US- 2023- 118885	90049	Adtran 1202752G1	West	Consumer
10183	Furniture	St. John's	Canada	James Peterman	Nu-Dell	29- 12- 2023	CA- 2023- 146626	A0A	Nu-Dell Executive Frame	East	Corporate
10184	Furniture	Quebec City	Canada	Bruce Galang	Other	29- 12- 2023	CA- 2023- 141531	G1B	Hand- Finished Solid Wood Document Frame	East	Consumer
10185	Office Supplies	Quebec City	Canada	Bruce Galang	Acco	29- 12- 2023	CA- 2023- 141531	G1B	Acco Glide Clips	East	Consumer
10186	Furniture	New York City	United States	Patrick O'Donnell	Other	30- 12- 2023	US- 2023- 143259	10009	Bush Westfield Collection Bookcases, Fully Ass	East	Consumer
10187	Office Supplies	Columbus	United States	Chuck Clark	Eureka	30- 12- 2023	US- 2023- 126221	47201	Eureka The Boss Plus 12-Amp Hard Box Upright V	Central	Home Office

Cardinal

10188	Office Supplies	Fairfield	United States	Erica Bern	Cardinal	30- 12- 2023	US- 2023- 115427	94533	Slant-D Ring Binder, Heavy Gauge Vinyl	West	Corporate
10189	Office Supplies	New York City	United States	Patrick O'Donnell	Wilson Jones	30- 12- 2023	US- 2023- 143259	10009	Wilson Jones Legal Size Ring Binders	East	Consumer
10190	Office Supplies	Fairfield	United States	Erica Bern	GBC	30- 12- 2023	US- 2023- 115427	94533	GBC Binding covers	West	Corporate
10191	Office Supplies	Loveland	United States	Jill Matthias	Other	30- 12- 2023	US- 2023- 156720	80538	Bagged Rubber Bands	West	Consumer
10192	Technology	New York City	United States	Patrick O'Donnell	Other	30- 12- 2023	US- 2023- 143259	10009	Gear Head AU3700S Headset	East	Consumer
10193	Office Supplies	Charlottetown	Canada	Harry Olson	Wilson Jones	30- 12- 2023	CA- 2023- 143500	C0A	Wilson Jones Impact Binders	East	Consumer

In [22]: store[:]

Out[22]:

	Category	City	Country/Region	Customer Name	Manufacturer	Order Date	Order ID	Postal Code	Product Name	Region	Segment
0	Office Supplies	Houston	United States	Darren Powers	Message Book	03- 01- 2020	US- 2020- 103800	77095	Message Book, Wirebound, Four 5 1/2" X 4" Form	Central	Consumer
1	Office Supplies	Naperville	United States	Phillina Ober	GBC	04- 01- 2020	US- 2020- 112326	60540	GBC Standard Plastic Binding Systems Combs	Central	Home Office
2	Office Supplies	Naperville	United States	Phillina Ober	Avery	04- 01- 2020	US- 2020- 112326	60540	Avery 508	Central	Home Office
3	Office Supplies	Naperville	United States	Phillina Ober	SAFCO	04- 01- 2020	US- 2020- 112326	60540	SAFCO Boltless Steel Shelving	Central	Home Office
4	Office Supplies	Philadelphia	United States	Mick Brown	Avery	05- 01- 2020	US- 2020- 141817	19143	Avery Hi- Liter EverBold Pen Style Fluorescent	East	Consumer
10189	Office Supplies	New York City	United States	Patrick O'Donnell	Wilson Jones	30- 12- 2023	US- 2023- 143259	10009	Wilson Jones Legal Size Ring Binders	East	Consumer
10190	Office Supplies	Fairfield	United States	Erica Bern	GBC	30- 12- 2023	US- 2023- 115427	94533	GBC Binding covers	West	Corporate
10191	Office Supplies	Loveland	United States	Jill Matthias	Other	30- 12- 2023	US- 2023- 156720	80538	Bagged Rubber Bands	West	Consumer
10192	Technology	New York City	United States	Patrick O'Donnell	Other	30- 12- 2023	US- 2023- 143259	10009	Gear Head AU3700S Headset	East	Consumer
10193	Office Supplies	Charlottetown	Canada	Harry Olson	Wilson Jones	30- 12- 2023	CA- 2023- 143500	C0A	Wilson Jones Impact Binders	East	Consumer

10194 rows × 19 columns

In [23]: store[::-1]

Out[23]:

:		Category	City	Country/Region	Customer Name	Manufacturer	Order Date	Order ID	Postal Code	Product Name	Region	Segment
	10193	Office Supplies	Charlottetown	Canada	Harry Olson	Wilson Jones	30- 12- 2023	CA- 2023- 143500	C0A	Wilson Jones Impact Binders	East	Consumer
	10192	Technology	New York City	United States	Patrick O'Donnell	Other	30- 12- 2023	US- 2023- 143259	10009	Gear Head AU3700S Headset	East	Consumer
	10191	Office Supplies	Loveland	United States	Jill Matthias	Other	30- 12- 2023	US- 2023- 156720	80538	Bagged Rubber Bands	West	Consumer
	10190	Office Supplies	Fairfield	United States	Erica Bern	GBC	30- 12- 2023	US- 2023- 115427	94533	GBC Binding covers	West	Corporate
	10189	Office Supplies	New York City	United States	Patrick O'Donnell	Wilson Jones	30- 12- 2023	US- 2023- 143259	10009	Wilson Jones Legal Size Ring Binders	East	Consumer
	4	Office Supplies	Philadelphia	United States	Mick Brown	Avery	05- 01- 2020	US- 2020- 141817	19143	Avery Hi- Liter EverBold Pen Style Fluorescent	East	Consumer
	3	Office Supplies	Naperville	United States	Phillina Ober	SAFCO	04- 01- 2020	US- 2020- 112326	60540	SAFCO Boltless Steel Shelving	Central	Home Office
	2	Office Supplies	Naperville	United States	Phillina Ober	Avery	04- 01- 2020	US- 2020- 112326	60540	Avery 508	Central	Home Office
	1	Office Supplies	Naperville	United States	Phillina Ober	GBC	04- 01- 2020	US- 2020- 112326	60540	GBC Standard Plastic Binding Systems Combs	Central	Home Office
	0	Office Supplies	Houston	United States	Darren Powers	Message Book	03- 01- 2020	US- 2020- 103800	77095	Message Book, Wirebound, Four 5 1/2" X 4" Form	Central	Consumer

10194 rows × 19 columns

In [24]: store[::10]

C	6- F	Ph. A	7	
	т	7.4		2

		Category	City	Country/Region	Customer Name	Manufacturer	Order Date	Order ID	Postal Code	Product Name	Region	Segment
	0	Office Supplies	Houston	United States	Darren Powers	Message Book	03- 01- 2020	US- 2020- 103800	77095	Message Book, Wirebound, Four 5 1/2" X 4" Form	Central	Consumer
	10	Office Supplies	Henderson	United States	Maria Etezadi	Southworth	06- 01- 2020	US- 2020- 167199	42420	Southworth 25% Cotton Granite Paper & Envelopes	South	Home Office
	20	Furniture	Dover	United States	Seth Vernon	DAX	11- 01- 2020	US- 2020- 130092	19901	DAX Value U-Channel Document Frames, Easel Back	East	Consumer
	30	Office Supplies	San Francisco	United States	Brian Dahlen	Tennsco	13- 01- 2020	US- 2020- 157147	94109	Tennsco 6- and 18- Compartment Lockers	West	Consumer
	40	Office Supplies	Scottsdale	United States	Toby Swindell	GBC	19- 01- 2020	US- 2020- 146591	85254	GBC Standard Recycled Report Covers, Clear Pla	West	Consumer
10	150	Office Supplies	Newark	United States	Dan Reichenbach	BIC	27- 12- 2023	US- 2023- 134404	43055	BIC Brite Liner Highlighters	East	Corporate
10	160	Office Supplies	New York City	United States	Jennifer Ferguson	Storex	28- 12- 2023	US- 2023- 164826	10024	Storex Dura Pro Binders	East	Consumer
10	170	Technology	New York City	United States	Jennifer Ferguson	Other	28- 12- 2023	US- 2023- 164826	10024	Cush Cases Heavy Duty Rugged Cover Case for Sa	East	Consumer
10	180	Office Supplies	New York City	United States	Michael Chen	Other	29- 12- 2023	US- 2023- 102638	10035	Ideal Clamps	East	Consumer
10	190	Office Supplies	Fairfield	United States	Erica Bern	GBC	30- 12- 2023	US- 2023- 115427	94533	GBC Binding covers	West	Corporate

1020 rows × 19 columns

In [25]: store[5:11]

```
City Country/Region
                                                                   Manufacturer
                                                                                                                       Region Segment
                Category
                                                            Name
                                                                                   Date
                                                                                              ID
                                                                                                    Code
                                                                                                                Name
                                                                                                                                           Date
                                                                                                               Global
                                                                                     06-
                                                                                             US-
                                                                                                               Deluxe
                                                                                                                                             10-
                                                                                                                                                  St
                                                            Maria
                                                                                                                                    Home
                Furniture Henderson
                                          United States
                                                                           Global
                                                                                     01-
                                                                                            2020-
                                                                                                   42420
                                                                                                            High-Back
                                                                                                                         South
                                                                                                                                             01-
                                                           Etezadi
                                                                                                                                    Office
                                                                                   2020
                                                                                          167199
                                                                                                            Manager's
                                                                                                                                           2020
                                                                                                                Chair
                                                                                                               Rogers
                                                                                     06-
                                                                                             US-
                                                                                                             Handheld
                                                                                                                                             10-
                                                                                                                                                  St
                   Office
                                                            Maria
                                                                                                                                    Home
             6
                           Henderson
                                          United States
                                                                          Rogers
                                                                                     01-
                                                                                            2020-
                                                                                                   42420
                                                                                                                Barrel
                                                                                                                         South
                                                                                                                                             01-
                 Supplies
                                                           Etezadi
                                                                                                                                    Office
                                                                                   2020
                                                                                          167199
                                                                                                                Pencil
                                                                                                                                           2020
                                                                                                            Sharpener
                                                                                                                Dixon
                                                                                                                Prang
                                                                                     06-
                                                                                             US-
                                                                                                                                             07-
                   Office
                                                                                                            Watercolor
                                                              Jack
             7
                              Athens
                                          United States
                                                                           Dixon
                                                                                     01-
                                                                                            2020-
                                                                                                   30605
                                                                                                                         South Corporate
                                                                                                                                             01-
                 Supplies
                                                          O'Briant
                                                                                                              Pencils,
                                                                                   2020
                                                                                          106054
                                                                                                                                           2020
                                                                                                              10-Color
                                                                                                               Set w...
                                                                                                              Ibico Hi-
                                                                                     06-
                                                                                             US-
                                                                                                                 Tech
                                                                                                                                             10-
                   Office
                                                                                                                                                  St
                                                            Maria
                                                                                                                                    Home
                                          United States
                                                                                     01-
                                                                                            2020-
                                                                                                               Manual
                                                                                                                                             01-
                           Henderson
                                                                                                   42420
                                                                                                                         South
                 Supplies
                                                                                                                                    Office
                                                           Etezadi
                                                                                                                                           2020
                                                                                   2020
                                                                                          167199
                                                                                                               Binding
                                                                                                               System
                                                                                                              Alliance
                                                                                     06-
                                                                                             US-
                                                                                                            Super-Size
                                                                                                                                             10-
                   Office
                                                                                                                                                  St
                                                            Maria
                                                                                                                                    Home
                                          United States
                                                                         Alliance
                                                                                     01-
                                                                                            2020-
                                                                                                   42420
                                                                                                                                             01-
                           Henderson
                                                                                                               Bands,
                                                                                                                         South
                 Supplies
                                                           Etezadi
                                                                                                                                    Office
                                                                                   2020
                                                                                          167199
                                                                                                              Assorted
                                                                                                                                           2020
                                                                                                                Sizes
                                                                                                           Southworth
                                                                                                                 25%
                                                                                     06-
                                                                                             US-
                                                                                                                                             10-
                   Office
                                                            Maria
                                                                                                                Cotton
                                                                                                                                    Home
                                                                                                                                             01-
            10
                                          United States
                                                                                     01-
                                                                                           2020-
                                                                                                   42420
                           Henderson
                                                                      Southworth
                                                                                                                         South
                 Supplies
                                                           Etezadi
                                                                                                               Granite
                                                                                                                                    Office
                                                                                   2020
                                                                                          167199
                                                                                                                                           2020
                                                                                                              Paper &
                                                                                                            Envelopes
In [26]: store.columns
Out[26]: 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 [27]: store['Category']
Out[27]:
            0
                       Office Supplies
            1
                       Office Supplies
                       Office Supplies
            2
            3
                       Office Supplies
            4
                       Office Supplies
                       Office Supplies
            10189
            10190
                       Office Supplies
            10191
                       Office Supplies
            10192
                             Technology
                       Office Supplies
            10193
            Name: Category, Length: 10194, dtype: object
In [28]: store['Ship Mode']
                       Standard Class
Out[28]:
           0
                       Standard Class
            1
                       Standard Class
            2
                       Standard Class
            4
                       Standard Class
            10189
                       Standard Class
                       Standard Class
            10190
            10191
                       Standard Class
            10192
                       Standard Class
                       Standard Class
            10193
            Name: Ship Mode, Length: 10194, dtype: object
In [29]: store[['Category','City']]
```

Order

Order

Customer

Postal

Product

Ship

Out[25]:

```
0 Office Supplies
                           Houston
                          Naperville
   1 Office Supplies
    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
```

City

Out[29]:

Category

```
In [31]: store_cat
```

:	Cat	tegory	City	Country/Region	Customer Name	Manufacturer	Order Date	Order ID	Postal Code	Product Name	Region	Segment
	0 _{St}	Office upplies	Houston	United States	Darren Powers	Message Book	03- 01- 2020	US- 2020- 103800	77095	Message Book, Wirebound, Four 5 1/2" X 4" Form	Central	Consumer
	1 _{Su}	Office upplies	Naperville	United States	Phillina Ober	GBC	04- 01- 2020	US- 2020- 112326	60540	GBC Standard Plastic Binding Systems Combs	Central	Home Office
	2 Su	Office upplies	Naperville	United States	Phillina Ober	Avery	04- 01- 2020	US- 2020- 112326	60540	Avery 508	Central	Home Office
	3 _{St}	Office upplies	Naperville	United States	Phillina Ober	SAFCO	04- 01- 2020	US- 2020- 112326	60540	SAFCO Boltless Steel Shelving	Central	Home Office
	4 Տւ	Office upplies	Philadelphia	United States	Mick Brown	Avery	05- 01- 2020	US- 2020- 141817	19143	Avery Hi- Liter EverBold Pen Style Fluorescent	East	Consumer
10 ⁻	189 Տւ	Office upplies	New York City	United States	Patrick O'Donnell	Wilson Jones	30- 12- 2023	US- 2023- 143259	10009	Wilson Jones Legal Size Ring Binders	East	Consumer
10	190 Տւ	Office upplies	Fairfield	United States	Erica Bern	GBC	30- 12- 2023	US- 2023- 115427	94533	GBC Binding covers	West	Corporate
10	191 ຣເ	Office upplies	Loveland	United States	Jill Matthias	Other	30- 12- 2023	US- 2023- 156720	80538	Bagged Rubber Bands	West	Consumer
10	192 Tech	nology	New York City	United States	Patrick O'Donnell	Other	30- 12- 2023	US- 2023- 143259	10009	Gear Head AU3700S Headset	East	Consumer
10	193 ຣເ	Office upplies	Charlottetown	Canada	Harry Olson	Wilson Jones	30- 12- 2023	CA- 2023- 143500	C0A	Wilson Jones Impact Binders	East	Consumer

10194 rows × 15 columns

In [32]: store_num

Out[32]:

	Discount	Profit	Quantity	Sales
0	0.2	5.5512	2	16.448
1	8.0	-5.4870	2	3.540
2	0.2	4.2717	3	11.784
3	0.2	-64.7748	3	272.736
4	0.2	4.8840	3	19.536
10189	0.2	19.7910	3	52.776
10190	0.2	6.4750	2	20.720
10191	0.2	-0.6048	3	3.024
10192	0.0	2.7279	7	90.930
10193	0.2	-0.6048	3	3.024

10194 rows × 4 columns

In [33]: print(len(store.columns))
 print(len(store_cat.columns))
 print(len(store_num.columns))

In [38]: store_cat.tail()

```
In [34]: store cat.head(1)
                                           Customer
                                                                 Order
                                                                        Order Postal
                                                                                       Product
Out[34]:
            Category
                        City Country/Region
                                                    Manufacturer
                                                                                               Region Segment
                                              Name
                                                                           ID
                                                                               Code
                                                                                         Name
                                                                                       Message
                                                                                         Book,
                                                                   03-
                                                                          US-
                                                                                                                 07-
               Office
                                              Darren
                                                        Message
                                                                                     Wirebound,
                                                                                                                      Stanc
                               United States
                                                                        2020-
                                                                               77095
                     Houston
                                                                   01-
                                                                                                Central Consumer
                                                                                                                 01-
             Supplies
                                             Powers
                                                           Book
                                                                                      Four 5 1/2"
                                                                                                                        CI
                                                                  2020
                                                                       103800
                                                                                                                2020
                                                                                          X 4"
                                                                                        Form
In [35]: store cat.info()
        <class 'pandas.core.frame.DataFrame'>
        RangeIndex: 10194 entries, 0 to 10193
        Data columns (total 15 columns):
         #
            Column
                            Non-Null Count Dtype
        - - -
             -----
                             -----
         0
            Category
                             10194 non-null object
                             10194 non-null object
             City
         1
                                             object
             Country/Region 10194 non-null
                             10194 non-null object
         3
             Customer Name
         4
             Manufacturer
                             10194 non-null object
         5
             Order Date
                             10194 non-null object
         6
             Order ID
                             10194 non-null object
                             10194 non-null object
             Postal Code
         7
         8
             Product Name
                             10194 non-null object
                             10194 non-null object
         9
             Region
                                             object
         10 Segment
                             10194 non-null
                             10194 non-null object
             Ship Date
         11
         12 Ship Mode
                             10194 non-null object
         13 State/Province 10194 non-null object
         14 Sub-Category
                             10194 non-null object
        dtypes: object(15)
        memory usage: 1.2+ MB
In [36]: store_num.info()
        <class 'pandas.core.frame.DataFrame'>
        RangeIndex: 10194 entries, 0 to 10193
        Data columns (total 4 columns):
         # Column
                      Non-Null Count Dtype
                       -----
         0 Discount 10194 non-null float64
                       10194 non-null float64
         1
             Profit
             Quantity 10194 non-null
                                       int64
                       10194 non-null float64
            Sales
        dtypes: float64(3), int64(1)
        memory usage: 318.7 KB
In [37]: store num.head()
Out[37]:
            Discount
                       Profit Quantity
                                       Sales
         0
                 0.2
                      5.5512
                                       16.448
         1
                 0.8
                      -5.4870
                                   2
                                       3.540
         2
                 0.2
                      4.2717
                                   3
                                      11.784
         3
                 0.2 -64.7748
                                   3 272.736
                      4.8840
                                      19.536
```

S

In [39]:

Out[39]:

:		Category	City	Country/Region	Customer Name	Manufacturer	Order Date	Order ID	Postal Code	Product Name	Region	Segment	Ship Date	
	count	10194	10194	10194	10194	10194	10194	10194	10194	10194	10194	10194	10194	
	unique	3	542	2	800	183	1242	5111	654	1849	4	3	1338	
	top	Office Supplies	New York City	United States	William Brown	Other	05- 09- 2022	US- 2023- 100111	10035	Staples	West	Consumer	16- 12- 2021	Sta
	freq	6128	915	9994	41	1940	38	14	263	50	3253	5281	38	

In [40]: store_num.describe()

Out[40]:

	Discount	Profit	Quantity	Sales
count	10194.000000	10194.000000	10194.000000	10194.000000
mean	0.155385	28.673417	3.791838	228.225854
std	0.206249	232.465115	2.228317	619.906839
min	0.000000	-6599.978000	1.000000	0.444000
25%	0.000000	1.760800	2.000000	17.220000
50%	0.200000	8.690000	3.000000	53.910000
75%	0.200000	29.297925	5.000000	209.500000
max	0.800000	8399.976000	14.000000	22638.480000

In [41]: store.describe()

Out[41]:

	Discount	Profit	Quantity	Sales
count	10194.000000	10194.000000	10194.000000	10194.000000
mean	0.155385	28.673417	3.791838	228.225854
std	0.206249	232.465115	2.228317	619.906839
min	0.000000	-6599.978000	1.000000	0.444000
25%	0.000000	1.760800	2.000000	17.220000
50%	0.200000	8.690000	3.000000	53.910000
75%	0.200000	29.297925	5.000000	209.500000
max	0.800000	8399.976000	14.000000	22638.480000

Loading [MathJax]/jax/output/CommonHTML/fonts/TeX/fontdata.js