```
import pandas as pd
df = pd.read_csv('Sales Dataset.csv')
print(df)
print(df.dtypes)
print(df.describe())
print(df.isna().sum())
df= df.dropna()
print(df.isna().sum())
print(df.duplicated())
df.drop_duplicates(inplace = True)
print(df)
print(df.head(20))
print(df['Category'])
print(df[['Amount','Profit']])
from matplotlib import pyplot
from pandas import read csv
df = read_csv('Sales Dataset.csv')
df.hist()
pyplot.show()
df.plot("Profit")
pyplot.show()
df = df.head(7)
df.plot(x="Profit",y="Quantity")
pyplot.show()
df.plot(kind="box", subplots=True, layout=(3,2))
pyplot.show()
df.plot(kind="bar", subplots=True, layout=(5,3))
pyplot.show()
df.plot(kind='density', subplots=True, layout=(3,2))
pyplot.show()
df.plot(kind='density')
pyplot.show()
```

	Order ID	Amount	Profit	Quantity	Category	Sub-Category	PaymentMode	Order Date	CustomerName	State	City	Year-Month
0	B-26776	9726	1275	5	Electronics	Electronic Games	UPI	2023-06-27	David Padilla	Florida	Miami	2023-06
1	B-26776	9726	1275	5	Electronics	Electronic Games	UPI	2024-12-27	Connor Morgan	Illinois	Chicago	2024-12
2	B-26776	9726	1275	5	Electronics	Electronic Games	UPI	2021-07-25	Robert Stone	New York	Buffalo	2021-07
3	B-26776	4975	1330	14	Electronics	Printers	UPI	2023-06-27	David Padilla	Florida	Miami	2023-06
4	B-26776	4975	1330	14	Electronics	Printers	UPI	2024-12-27	Connor Morgan	Illinois	Chicago	2024-12
1189	B-26370	8825	3594	15	Furniture	Tables	Debit Card	2024-07-31	Megan Mclean	New York	New York City	2024-07
1190	B-26298	2082	642	8	Electronics	Phones	EMI	2020-06-02	Caitlin Hunt	New York	Rochester	2020-06
1191	B-26298	2082	642	8	Electronics	Phones	EMI	2022-12-15	Jenna Holland	Texas	Austin	2022-12
1192	B-26298	2082	642	8	Electronics	Phones	EMI	2020-08-07	Stephanie Oconnell	New York	Buffalo	2020-08
1193	B-25068	914	163	13	Office Supplies	Markers	UPI	2024-10-26	Andrea Hill	Illinois	Chicago	2024-10
[1194	1 rows x 1	2 column	s]									
Orde	· ID	object										
Amou	nt	int64										
Prof:	it	int64										
Quant	tity	int64										
Cate	gory	object										
Sub-	Category	object										
Payme	entMode	object										
Orde	Date	object										
Custo	omerName	object										
State	2	object										
City		object										
Year-	-Month	object										
dtype	e: object											
									·			· · · · · · · · · · · · · · · · · · ·

•	Amount	Profit	Quantity	
count	1194.000000	1194.000000	1194.000000	
mean	5178.089615	1348.992462	10.674204	
std	2804.921955	1117.992573	5.777102	
min	508.000000	50.000000	1.000000	
25%	2799.000000	410.000000	6.000000	
50%	5152.000000	1014.000000	11.000000	
75%	7626.000000	2035.000000	16.000000	
max	9992.000000	4930.000000	20.000000	

Order ID	0
Amount	0
Profit	0
Quantity	0
Category	0
Sub-Category	0
PaymentMode	0
Order Date	0
CustomerName	0
State	0
City	0
Year-Month	0
dtype: int64	
Order ID	0
Amount	0
Profit	0
Quantity	0
Category	0
Sub-Category	0
PaymentMode	0
Order Date	0
CustomerName	0
State	0
City	0
Year-Month	0

```
False
         False
3
         False
1189
         False
 1190
         False
         False
 1192
         False
1193
        False
 Length: 1194, dtype: bool
                       Profit Quantity
                                                               Sub-Category PaymentMode Order Date
                                                 Category
                                                                                                            CustomerName
                                                                                                                                             City Year-Month
       B-26776
                                                                                    UPI
                                              Electronics
                                                          Electronic Games
                                                                                          2023-06-27
                                                                                                           David Padilla
                                                                                                                           Florida
                                                                                                                                            Miami
                                                                                                                                                      2023-06
                 9726
                                       5
                                                                                                                                          Chicago
       B-26776
                  9726
                          1275
                                              Electronics Electronic Games
                                                                                     UPI
                                                                                          2024-12-27
                                                                                                           Connor Morgan
                                                                                                                          Illinois
                                                                                                                                                      2024-12
                                                                                                            Robert Stone
                                                                                                                                                      2021-07
       B-26776
                  9726
                          1275
                                              Electronics Electronic Games
                                                                                     UPI
                                                                                          2021-07-25
                                                                                                                          New York
                                                                                                                                          Buffalo
       B-26776
                  4975
                                              Electronics
                                                                                     UPI
                                                                                          2023-06-27
                                                                                                           David Padilla
                                                                                                           Connor Morgan
       B-26776
                  4975
                          1330
                                      14
                                              Electronics
                                                                   Printers
                                                                                     UPT
                                                                                          2024-12-27
                                                                                                                          Illinois
                                                                                                                                          Chicago
                                                                                                                                                      2024-12
                                      ...
15
                                                Furniture
                                                                      Tables Debit Card 2024-07-31
 1189
      B-26370
                  8825
                          3594
                                                                                                            Megan Mclean
                                                                                                                          New York
                                                                                                                                    New York City
                                                                                                                                                      2024-07
                                              Electronics
                                                                                     EMI
                                                                     Phones
                  2082
 1191
      B-26298
                           642
                                              Electronics
                                                                     Phones
                                                                                     EMI
                                                                                          2022-12-15
                                                                                                           Jenna Holland
                                                                                                                             Texas
                                                                                                                                           Austin
                                                                                                                                                      2022-12
                                                                                                                          New York
 1192 B-26298
                  2082
                           642
                                       8
                                              Electronics
                                                                     Phones
                                                                                     EMI
                                                                                         2020-08-07 Stephanie Oconnell
                                                                                                                                          Buffalo
                                                                                                                                                      2020-08
[1194 rows x 12 columns]
                     Profit Quantity
                                                                                                                                              City Year-Month
   Order ID Amount
                                              Category
                                                             Sub-Category PaymentMode
                                                                                        Order Date
                                                                                                                              State
                                                                                                                            Florida
0
   B-26776
               9726
                       1275
                                           Electronics Electronic Games
                                                                                        2023-06-27
                                                                                                         David Padilla
                                                                                                                                             Miami
                                                                                                                                                      2023-06
                                                                                                                           Illinois
                                                                                                                                           Chicago
   B-26776
               9726
                       1275
                                           Electronics Electronic Games
                                                                                   UPI
                                                                                        2024-12-27
                                                                                                          Connor Morgan
                                                                                                                                                      2024-12
2
   B-26776
               9726
                       1275
                                           Electronics Electronic Games
                                                                                   UPI
                                                                                        2021-07-25
                                                                                                          Robert Stone
                                                                                                                           New York
                                                                                                                                           Buffalo
                                                                                                                                                      2021-07
               4975
                                                                                                                           Florida
    B-26776
                       1330
                                                                                   UPI
                                                                                        2023-06-27
                                                                                                                                                      2023-06
   B-26776
4
5
               4975
                       1330
                                           Electronics
                                                                 Printers
                                                                                   UPI
                                                                                        2024-12-27
                                                                                                          Connor Morgan
                                                                                                                           Illinois
                                                                                                                                           Chicago
                                                                                                                                                      2024-12
   B-26776
               4975
                       1330
                                   14
                                           Electronics
                                                                 Printers
                                                                                   UPI
                                                                                        2021-07-25
                                                                                                          Robert Stone
                                                                                                                           New York
                                                                                                                                           Buffalo
                                                                                                                                                      2021-07
                                       Office Supplies
                                                                            Debit Card
                                                                                                           John Fields
   B-26942
               1525
                                                                                        2024-05-11
                                                                                                                            Florida
                                                                                                                                           Orlando
                                                                                                                                                      2024-05
                        185
                                                                    Pens
    B-26942
               1525
                        185
                                       Office Supplies
                                                                    Pens
                                                                           Debit Card
                                                                                        2021-10-09
                                                                                                          Clayton Smith
                                                                                                                            Florida
                                                                                                                                             Miami
                                                                                                                                                      2021-10
    B-26640
                883
                                           Electronics
                                                                  Laptops
                                                                                   EMI
                                                                                        2022-11-18
                                                                                                         Richard Kelley
                                                                                                                         California
                                                                                                                                       Los Angeles
                                                                                                                                                       2022-11
                                   10
    B-26640
               8127
                       3551
                                   16
                                             Furniture
                                                                   Tables
                                                                           Credit Card
                                                                                        2022-11-18
                                                                                                        Richard Kellev
                                                                                                                        California
                                                                                                                                       Los Angeles
                                                                                                                                                      2022-11
10
                                                                                  UPI
                                                                                                    Jacqueline Hubbard
                                                                                                                                     New York City
   B-25890
               2516
                        734
                                   19
                                             Furniture
                                                                   Chairs
                                                                                        2023-11-12
                                                                                                                           New York
                                                                                                                                                      2023-11
                                                                           Credit Card
               2975
                        462
                                       Office Supplies
                                                                                        2020-03-23
                                                                                                      Jessica Anderson
                                                                                                                           New York
                                                                                                                                     New York City
11
   B-25102
                                                                    Pens
                                                                                                                                                      2020-03
    B-25426
               6851
                       2812
                                       Office Supplies
                                                                           Debit Card
                                                                                        2020-05-04
                                                                                                           Mary Taylor
                                                                                                                            Florida
                                                                                                                                           Orlando
                                                                                                                                                       2020-05
    B-25426
               7626
                       1946
                                             Furniture
                                                                   Sofas Credit Card
                                                                                        2020-05-04
                                                                                                           Mary Taylor
                                                                                                                            Florida
                                                                                                                                           Orlando
                                                                                                                                                      2020-05
                                                                                                       Mary Taylor
Walter Crawford
14
   B-25426
               1023
                        78
                                             Furniture
                                                                   Tables
                                                                                   UPI
                                                                                        2020-05-04
                                                                                                                            Florida
                                                                                                                                           Orlando
                                                                                                                                                      2020-05
                                       Office Supplies
                                                                                   UPI
                                                                                        2023-11-09
                                                                                                                           Illinois
15
   B-25238
               7600
                       1098
                                   10
                                                                    Pens
                                                                                                                                       Springfield
                                                                                                                                                      2023-11
               7501
                                                                                   COD
                                                                                                       Walter Crawford
                                       Office Supplies
                                                                    Paper
                                                                                                                           Illinois
                                                                                                                                       Springfield
                                                                                                                                                      2023-11
                                                                                                                                         Rochester
17
    B-25051
                        133
                                       Office Supplies
                                                                    Paper Credit Card
                                                                                        2024-12-30
                                                                                                     Lawrence Robinson
                                                                                                                           New York
                                                                                                                                                      2024-12
18
    B-25051
               7201
                       2685
                                             Furniture
                                                                   Tables Credit Card
                                                                                        2024-12-30
                                                                                                     Lawrence Robinson
                                                                                                                           New York
                                                                                                                                         Rochester
                                                                                                                                                      2024-12
                                       Office Supplies
               1629
                                                                                   UPI
                                                                                        2025-02-11
                                                                                                    Douglas Pennington
                                                                                                                                            Dallas
                                                                                                                                                      2025-02
19
    B-26510
                        265
                                                                    Paper
                                                                                                                             Texas
                     Electronics
                     Electronics
                     Electronics
                     Electronics
                     Electronics
                        Furniture
                     Electronics
```

```
0
1
2
3
4
1189
1190
1191
             Electronics
1192
             Electronics
1193
        Office Supplies
Name: Category, Length: 1194, dtype: object
Name: Category, Length: 1194, dtype: object
      Amount Profit
0
        9726
                 1275
1
        9726
                 1275
2
        9726
                 1275
3
        4975
                 1330
4
        4975
                 1330
          . . .
1189
        8825
                 3594
1190
         2082
                  642
1191
         2082
                  642
1192
         2082
                  642
1193
          914
                  163
[1194 rows x 2 columns]
```













