```
In [2]: import pandas as pd
In [4]: data = pd.read csv('C:/Users/ADMIN/Downloads/Day 8 sales data.csv')
In [6]: sales above 1000 = data[data['Sales'] > 1000]
         print("Sales Records with Sales Greater Than 1000:")
         print(sales above 1000)
       Sales Records with Sales Greater Than 1000:
                          Product Region Sales Profit Quantity
                 Date
           2023-01-02
                           Tablet East 1061.81 236.12
                           Laptop North 1926.07 246.34
Tablet East 1597.99 253.17
           2023-01-06
       1
                                                                 8
       2
           2023-01-03
                                                                 3
       3
           2023-01-20
                           Tablet North 1397.99 242.23
                                                                 1
           2023-01-07 Smartphone East 1799.26 364.97
                                                                 2
       8
           2023-01-11 Smartphone
                                   West 1401.67 306.24
       9
           2023-01-01
                           Laptop North
                                         1562.11
                                                  170.72
                                                                 6
       11 2023-01-12
                           Laptop
                                   West 1954.86 262.16
                                                                 4
           2023-01-09
                          Monitor North 1748.66 197.62
                                                                 6
       12
                                   West 1287.13 153.86
           2023-01-18
                                                                 7
       17
                          Monitor
       18
           2023-01-13
                           Tablet
                                   West 1147.92 271.88
                                                                 9
In [8]: east_region_sales = data[data['Region'] == 'East']
         print("\nSales Records for East Region:")
         print(east_region_sales)
       Sales Records for East Region:
                 Date
                          Product Region
                                           Sales Profit Quantity
           2023-01-02
                           Tablet East 1061.81 236.12
       0
       2
           2023-01-03
                           Tablet
                                   East 1597.99
                                                  253.17
                                                                 3
           2023-01-14
                        Keyboard East
                                         587.13
                                                   82.16
                                                                 8
           2023-01-07 Smartphone East 1799.26 364.97
                                                                 4
       14 2023-01-08
                          Laptop East 772.74 226.51
                                                                 2
In [10]: data['Profit Per Unit'] = data['Profit'] / data['Quantity']
         print("\nData with Profit Per Unit:")
         print(data[['Product', 'Profit', 'Quantity', 'Profit Per Unit']])
       Data with Profit Per Unit:
              Product Profit Quantity Profit_Per_Unit
       0
               Tablet 236.12
                                     7
                                              33.731429
               Laptop 246.34
                                      8
                                              30.792500
       1
                                             84.390000
       2
               Tablet
                       253.17
                                      3
               Tablet 242.23
                                           242.230000
       3
                                     1
                                            35.090000
       4
               Laptop 140.36
                                     4
       5
               Tablet 188.66
                                     2
                                              94.330000
                                             10.270000
       6
             Keyboard
                       82.16
                                     8
                                             91.242500
       7
           Smartphone 364.97
                                     4
       8
           Smartphone 306.24
                                     2
                                           153.120000
              Laptop 170.72
Monitor 117.59
                                            28.453333
19.598333
       9
                                     6
       10
                                     6
              Laptop 262.16
                                             65.540000
                                     4
       11
       12
             Monitor 197.62
                                     6
                                             32.936667
       13
           Smartphone 237.19
                                      2
                                             118.595000
              Laptop 226.51
                                            113.255000
       14
                                     2
       15
             Keyboard 202.83
                                     4
                                             50.707500
                                             19.237500
       16
               Tablet 153.90
                                     8
       17
              Monitor
                      153.86
                                     7
                                              21.980000
               Tablet 271.88
       18
                                     9
                                               30.208889
       19
               Tablet 176.15
                                              22.018750
In [12]: import numpy as np
         data['High Sales'] = np.where(data['Sales'] > 1000, 'Yes', 'No')
         print("\nData with High Sales Column:")
         print(data[['Product', 'Sales', 'High_Sales']])
```

Data	with High	Sales Co	Lumn:
	Product	Sales	High_Sales
0	Tablet	1061.81	Yes
1	Laptop	1926.07	Yes
2	Tablet	1597.99	Yes
3	Tablet	1397.99	Yes
4	Laptop	734.03	No
5	Tablet	733.99	No
6	Keyboard	587.13	No
7	${\tt Smartphone}$	1799.26	Yes
8	${\tt Smartphone}$	1401.67	Yes
9	Laptop	1562.11	Yes
10	Monitor	530.88	No
11	Laptop	1954.86	Yes
12	Monitor	1748.66	Yes
13	${\tt Smartphone}$	818.51	No
14	Laptop	772.74	No
15	Keyboard	775.11	No
16	Tablet	956.36	No
17	Monitor	1287.13	Yes
18	Tablet	1147.92	Yes
19	Tablet	936.84	No

In []:

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