from google.colab import drive drive.mount('/content/drive') Mounted at /content/drive cd drive/ /content/drive cd MyDrive /content/drive/MyDrive import pandas as pd import numpy as np import matplotlib.pyplot as plt df=pd.read_csv("SampleSuperstore.csv") df.head() Ship Postal City Segment Country State Region Category Mode Code Cat Second United 0 Consumer Henderson Kentucky 42420 South Furniture Book Class States Second United Consumer Henderson Kentucky 42420 South Furniture Class States United Office California 90036 1 Corporate West Angeles Class States Supplies Standard United Fort Consumer Florida 33311 South Furniture df.drop(columns="Postal Code") Ship S Segment Country City Region Category State Mode Categ Second United 0 Consumer Henderson Kentucky South Furniture Bookca Class States United Second 1 Consumer Henderson Kentucky South **Furniture** Ch Class States Second United Office 2 California Corporate Los Angeles West Lat Class States Supplies Standard United Fort 3 Consumer Florida South Furniture Tat Lauderdale Class States United Fort Office Standard 4 Consumer Florida South Stor Supplies Class States Lauderdale ... United Second 9989 Consumer Miami Florida South Furniture Furnishi Class States Standard United 9990 Consumer Costa Mesa California West Furniture Furnishi df.drop(columns="Postal Code", inplace=True) df.head() Ship Sub-City Segment Country State Region Category Mode Category Second United 0 Consumer Henderson Kentucky South Furniture Bookcases 2 Class States Second United Chairs 7 Consumer Henderson Kentucky South Furniture Class States

```
Second
                                 United
                                                Los
                                                                             Office
                    Corporate
                                                      California
                                                                  West
                                                                                        Labels
            Class
                                 States
                                             Angeles
                                                                          Sunnlies
print(df["Ship Mode"].unique())
print(df["Segment"].unique())
```

```
print(df["Category"].unique())
print(df["City"].unique())
print(df["State"].unique())
print(df["Region"].unique())
print(df["Sub-Category"].unique())
print(df["Sales"].unique())
print(df["Quantity"].unique())
print(df["Discount"].unique())
print(df["Profit"].unique())
            'Thousand Oaks' 'Malden' 'Holyoke' 'Albuquerque' 'Sparks' 'Coachella'
           'Elmhurst' 'Passaic' 'North Charleston' 'Newport News' 'Jamestown' 'Mishawaka' 'La Quinta' 'Tallahassee' 'Nashville' 'Bellingham' 'Woodstock' 'Haltom City' 'Wheeling' 'Summerville' 'Hot Springs' 'Englewood' 'Las Cruces' 'Hoover' 'Frisco' 'Vacaville' 'Waukesha'
            'Bakersfield' 'Pompano Beach' 'Corpus Christi' 'Redondo Beach' 'Orlando'
            'Orange' 'Lake Charles' 'Highland Park' 'Hempstead' 'Noblesville'
           'Apple Valley' 'Mount Pleasant' 'Sterling Heights' 'Eau Claire' 'Pharr'
'Billings' 'Gresham' 'Chattanooga' 'Meridian' 'Bolingbrook' 'Maple Grove'
            'Woodland' 'Missouri City' 'Pearland' 'San Mateo' 'Grand Rapids'
'Visalia' 'Overland Park' 'Temecula' 'Yucaipa' 'Revere' 'Conroe'
           'Tinley Park' 'Dubuque' 'Dearborn Heights' 'Santa Fe' 'Hickory'
'Carol Stream' 'Saint Cloud' 'North Miami' 'Plantation'
            'Port Saint Lucie' 'Rock Hill' 'Odessa' 'West Allis' 'Chula Vista'
           'Manhattan' 'Altoona' 'Thornton' 'Champaign' 'Texarkana' 'Edinburg
'Baytown' 'Greenwood' 'Woonsocket' 'Superior' 'Bedford' 'Covington
            'Broken Arrow' 'Miramar' 'Hollywood' 'Deer Park' 'Wichita' 'Mcallen'
            'Iowa City' 'Boise' 'Cranston' 'Port Arthur' 'Citrus Heights'
           'Iowa City' 'Boise' 'Cranston' 'Port Arthur' 'Citrus Heights'
'The Colony' 'Daytona Beach' 'Bullhead City' 'Portage' 'Fargo' 'Elkhart'
'San Gabriel' 'Margate' 'Sandy Springs' 'Mentor' 'Lawton' 'Hampton'
'Rome' 'La Crosse' 'Lewiston' 'Hattiesburg' 'Danville' 'Logan'
'Waterbury' 'Athens' 'Avondale' 'Marietta' 'Yuma' 'Wausau' 'Pasco'
'Oak Park' 'Pensacola' 'League City' 'Gaithersburg' 'Lehi' 'Tuscaloosa'
'Moreno Valley' 'Georgetown' 'Loveland' 'Chandler' 'Helena' 'Kirkwood'
            'Waco' 'Frankfort' 'Bethlehem' 'Grand Island' 'Woodbury' 'Rogers'
           'Clovis' 'Jupiter' 'Santa Barbara' 'Cedar Hill' 'Norfolk' 'Draper'
'Ann Arbor' 'La Mesa' 'Pocatello' 'Holland' 'Milford' 'Buffalo Grove'
            'Lake Forest' 'Redding' 'Chico' 'Utica' 'Conway' 'Cheyenne' 'Owensboro' 'Caldwell' 'Kenner' 'Nashua' 'Bartlett' 'Redwood City' 'Lebanon'
            'Santa Maria' 'Des Plaines' 'Longview' 'Hendersonville' 'Waterloo'
           'Santa Maria' 'Des Plaines' 'Longview' Henuersonville waterioo'
'Cambridge' 'Palatine' 'Beverly' 'Eugene' 'Oxnard' 'Renton' 'Glenview'
'Delray Beach' 'Commerce City' 'Texas City' 'Wilson' 'Rio Rancho'
'Goldsboro' 'Montebello' 'El Cajon' 'Beaumont' 'West Palm Beach'
'Abilene' 'Normal' 'Saint Charles' 'Camarillo' 'Hillsboro' 'Burbank'
'Modesto' 'Garden City' 'Atlantic City' 'Longmont' 'Davis' 'Morgan Hill'
'Clifton' 'Sheboygan' 'East Point' 'Rapid City' 'Andover' 'Kissimmee'
            'Shelton' 'Danbury' 'Sanford' 'San Marcos' 'Greeley' 'Mansfield' 'Elyria'
            'Twin Falls' 'Coral Gables' 'Romeoville' 'Marlborough' 'Laurel' 'Bryan'
           'Pine Bluff' 'Aberdeen' 'Hagerstown' 'East Orange' 'Arlington Heights' 'Oswego' 'Coon Rapids' 'San Clemente' 'San Luis Obispo' 'Springdale'
            'Lodi' 'Mason']
          ['Kentucky' 'California' 'Florida' 'North Carolina' 'Washington' 'Texas'
            'Wisconsin' 'Utah' 'Nebraska' 'Pennsylvania' 'Illinois' 'Minnesota'
           'Michigan' 'Delaware' 'Indiana' 'New York' 'Arizona' 'Virginia' 'Tennessee' 'Alabama' 'South Carolina' 'Oregon' 'Colorado' 'Iowa' 'Ohio' 'Missouri' 'Oklahoma' 'New Mexico' 'Louisiana' 'Connecticut' 'New Jersey' 'Massachusetts' 'Georgia' 'Nevada' 'Rhode Island' 'Mississippi'
           'Arkansas' 'Montana' 'New Hampshire' 'Maryland' 'District of Columbia' 'Kansas' 'Vermont' 'Maine' 'South Dakota' 'Idaho' 'North Dakota'
         'Wyoming' 'West Virginia']
['South' 'West' 'Central' 'East']
         ['Bookcases' 'Chairs' 'Labels' 'Tables' 'Storage' 'Furnishings' 'Art' 'Phones' 'Binders' 'Appliances' 'Paper' 'Accessories' 'Envelopes' 'Fasteners' 'Supplies' 'Machines' 'Copiers']
         [261.96 731.94 14.62 ... 437.472 97.98 243.16 ]
[2 3 5 7 4 6 9 1 8 14 11 13 10 12]
                  0.45 0.2 0.8 0.3 0.5 0.7 0.6 0.32 0.1 0.4 0.15]
         [ 41.9136 219.582
                                            6.8714 ... 16.124 4.1028 72.948 ]
```

df.describe()

print(at country (.unique())

```
df.info()
```

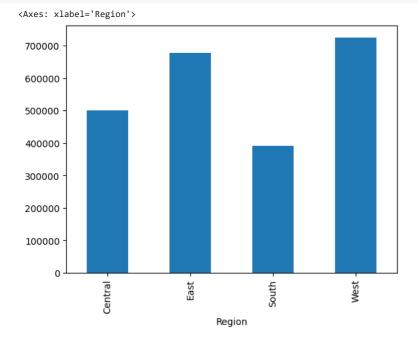
```
RangeIndex: 9994 entries, 0 to 9993
Data columns (total 12 columns):
# Column
                 Non-Null Count Dtype
    Ship Mode
                  9994 non-null
0
                                  object
    Segment
                  9994 non-null
1
                                  object
    Country
                  9994 non-null
2
                                  object
3
                  9994 non-null
    City
                                  object
4
                  9994 non-null
    State
                                  object
    Region
                  9994 non-null
                                  object
6
    Category
                  9994 non-null
                                  object
7
    Sub-Category 9994 non-null
                                  object
 8
    Sales
                  9994 non-null
                                  float64
    Quantity
                  9994 non-null
                                  int64
10 Discount
                  9994 non-null
                                  float64
                  9994 non-null
                                  float64
11 Profit
dtypes: float64(3), int64(1), object(8)
memory usage: 937.1+ KB
```

<class 'pandas.core.frame.DataFrame'>

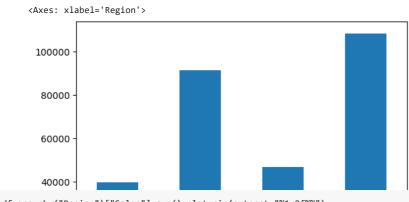
df.isna().sum()

Ship Mode Segment 0 Country City State 0 Region Category 0 Sub-Category 0 Sales 0 Quantity 0 Discount 0 Profit dtype: int64

df.groupby("Region")["Sales"].sum().plot.bar()

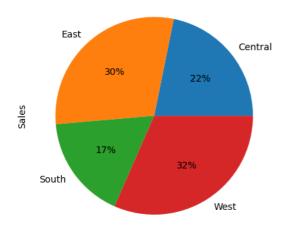


df.groupby("Region")["Profit"].sum().plot.bar()



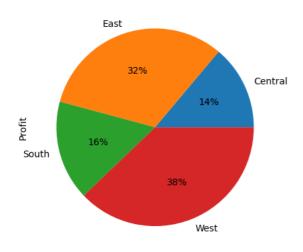
df.groupby("Region")["Sales"].sum().plot.pie(autopct="%1.0f%")

<Axes: ylabel='Sales'>

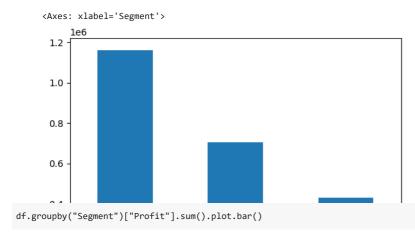


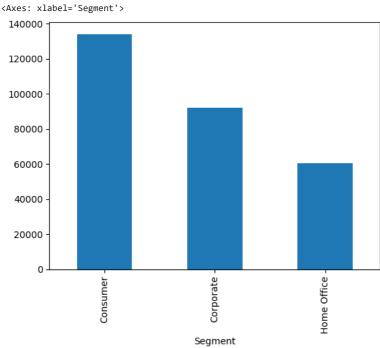
df.groupby("Region")["Profit"].sum().plot.pie(autopct="%1.0f%")

<Axes: ylabel='Profit'>

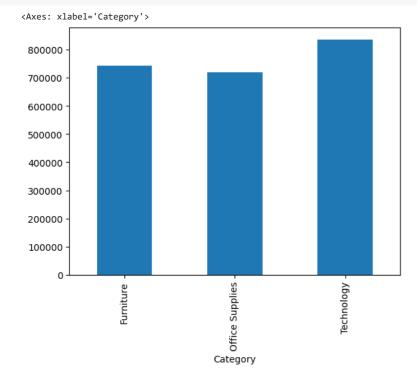


df.groupby("Segment")["Sales"].sum().plot.bar()

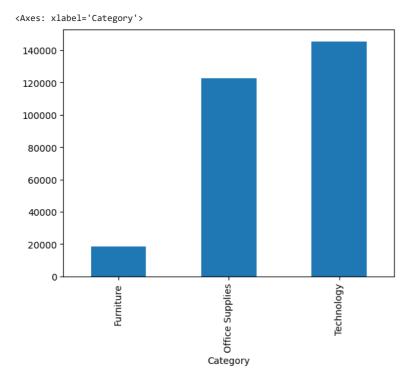




df.groupby("Category")["Sales"].sum().plot.bar()

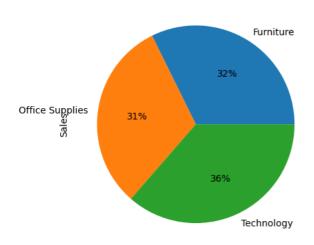


df.groupby("Category")["Profit"].sum().plot.bar()



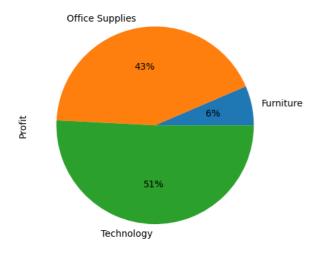
df.groupby("Category")["Sales"].sum().plot.pie(autopct="%1.0f%")

<Axes: ylabel='Sales'>

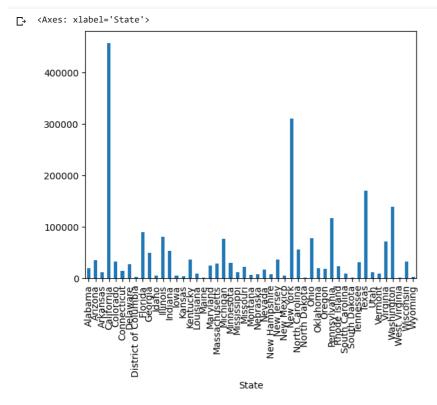


df.groupby("Category")["Profit"].sum().plot.pie(autopct="%1.0f%%")

<Axes: ylabel='Profit'>



df.groupby("State")["Sales"].sum().plot.bar()



df.groupby("State")["Profit"].sum().plot.bar()

