98 99 99	Standard Class Corporate United States Athens Georgia 30605 South Technology Accessories 79.990 1 0.0 28.7964  88 Standard Class Corporate United States Athens Georgia 30605 South Technology Phones 206.100 5 0.0 55.6470  89 Second Class Consumer United States Miami Florida 33180 South Furniture Furnishings 25.248 3 0.2 4.1028  90 Standard Class Consumer United States Costa Mesa California 92627 West Furniture Furnishings 91.960 2 0.0 15.6332  91 Standard Class Consumer United States Costa Mesa California 92627 West Technology Phones 258.576 2 0.2 19.3932  92 Standard Class Consumer United States Costa Mesa California 92627 West Office Supplies Paper 29.600 4 0.0 13.3200  93 Second Class Consumer United States Westminster California 92683 West Office Supplies Appliances 243.160 2 0.0 72.9480
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50 7! m	0% 54.49000 3.00000 0.20000 8.666500 5% 209.94000 5.00000 0.20000 29.364000  max 22638.48000 14.00000 0.80000 8399.976000  isualization of Data  lt.figure(figsize=(20,10)) lt.bar(fl['Sub-Category'],fl['Category']) lt.xlabel('Sub-Cat', size=50, color='red') lt.ylabel('Cat', size=30, color='red') lt.title('Sub-Cat VS Cat', size=30, color='red') lt.xticks(rotation=90) lt.yticks(color='green') lt.show()
	Sub-Cat VS Cat  Technology
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ese ese ese ese ese ese ese ese ese ese	Sub-Cat
	Region  to the same of the sam
sr sr o]	nalysing using barplot  ns.set(style='whitegrid') lt.figure(figsize=(15,10)) ns.barplot(x=fl['Sub-Category'], y=fl['Profit']) lt.title('Consumption') lt.show()  Consumption
	1000 800 600 400
	Bookcases Chairs Labels Tables Storage Furnishings Art Phones Binders Appliances Paper AccessorieÆnvelopesFasteners Supplies Machines Copiers Sub-Category
Fr	nalysing using ggplot  rom plotnine import * gplot(file, aes(x='Ship Mode', fill='Category'))+geom_bar(stat='count')  6000-  4000-  Category Furniture Office Supplies
D(	Technology  Technology  Technology  Technology  Technology  Technology  Technology  Technology  Technology
o] =:	It.figure(figsize=(15,10)) ns.pairplot(file, hue='Sub-Category') lt.show() igure size 1080x720 with 0 Axes> 100000 80000 400000 200000
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Prom	Accessories Envelopes Fastenrs Supplies Machines Copiers  7500 5000
sr ol	-2500 -5000 0 50000 100000 0 10000 20000 0 5 10 15 0.0 0.5 1.0 -5000 0 5000 10000 Postal Code 1t.figure(figsize=(10,5)) ns.lineplot(y=file['Profit'], x=file['Discount'], color='red') lt.show()
ij	-200 -300 -400 0.0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8  ile_region = file.groupby(['Region'])[['Sales', 'Discount', 'Profit']].mean() ile_region  Sales Discount Profit
e s	Intral   215.772661   0.240353   17.092709     East   238.336110   0.145365   32.135808     Intral   241.803645   0.147253   28.857673     Intral   241.803645   0.147253   28.857673     Intral   241.803645   0.147253   33.849032     Intral   241.803645   0.147253   28.857673     Intral   241.80365   0.147253   28.857673     Intral   241.80365   0.147253   28.857673     Intral   241.80365   0.147253   28.857673     Intral   241.80365   0.14725
90	Ausers\rudra\appdata\local\programs\python\python38-32\lib\site-packages\pandas\plotting\_matplotlib\core.py:1583: MatplotlibDeprecation rmalize=None does not normalize if the sum is less than 1 but this behavior is deprecated since 3.3 until two minor releases later. After cation period the default value will be normalize=True. To prevent normalization pass normalize=False ray([ <axessubplot:ylabel='sales'>, <axessubplot:ylabel='discount'>, <axessubplot:ylabel='profit'>], dtype=object)    Central</axessubplot:ylabel='profit'></axessubplot:ylabel='discount'></axessubplot:ylabel='sales'>
ul A	
	Bookcases 503.859633 0.211140 -15.230509 Chairs 532.332420 0.170178 43.095894 Copiers 2198.941618 0.161765 817.909190 Envelopes 64.867724 0.080315 27.418019 Fasteners 13.936774 0.082028 4.375660 Furnishings 95.825668 0.138349 13.645918  1t.figure(figsize = (15,15)) 1t.pie(file_sub_category['Sales'], labels = file_sub_category.index, autopct = '%1.1f%%') 1t.title('Sub-Category Wise Sales Analysis', fontsize = 20) 1t.legend() 1t.xticks(rotation = 90) 1t.show()
	Sub-Category Wise Sales Analysis  Accessories Appliances Art Binders Bookcases Chairs Copiers Envelopes Fasteners Furnishings Labels Machines Paper Phones Storage Storage Storage Supplies Tables
F	
ľ	Machines  Phones Paper
1	f_sub_category.sort_values('Profit')[['Sales', 'Profit']].plot(kind='bar', figsize= (10,5), label=['Avg Sales Price(\$)', 'Profit(\$)'])  xesSubplot:xlabel='Sub-Category'>